Empowerment and its Impact on Employees' Performance Development at Jordanian Public Hospitals in Northern Region from Employees' perspective

2013

التمكين وأثره على تطوير أداء العاملين في المستشفيات الحكومية الأردنية في إقليم الشمال من وجهة نظر العاملين

إعداد:

مجد تيسير حسين سلامه

بكالوريوس اللغة الإنجليزيه وأدابها، جامعة ال البيت، 2010

قدمت هذه الرسالة إستكمالاً لمتطلب الحصول على درجة الماجستير في الإدارة العامة في جامعة اليرموك، إربد، الأردن.

وافق عليها

أ.د نعيم عقلة نصير.. رئيساً

أستاذ في الإدارة العامة، جامعة اليرموك.

أ.د احمد "محمدسعيد" الشياب..عضواً

أستاذ في الإدارة العامة، جامعة اليرموك.

د حسن محمدالعيسى..عضواً

أستاذ مساعد في إدارة الأعمال، جامعة اليرموك.

تاريخ مناقشة الرسالة

2013/7 /21

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73	[illegible]	19
75	[illegible]	20
76	[illegible]	21
78	[illegible]	22
78	[illegible]	23
79	[illegible]	24
80	[illegible]	25
81	[illegible]	26
82	[illegible]	27
83	[illegible]	28
84	[illegible]	29
85	[illegible]	30
86	[illegible]	31
87	[illegible]	32
88	[illegible]	33
89	[illegible]	34
90	[illegible]	35
91	[illegible]	36
92	[illegible]	37
93	[illegible]	38
94	[illegible]	39

[illegible]

[illegible]	[illegible]	[illegible]
109	[illegible]	1
115	[illegible]	2
116	[illegible]	3
117	[illegible]	4
118	[illegible]	5
119	[illegible]	6
120	[illegible]	7
121	[illegible]	8

üƑ׀ʅǗɛ ƕƉŽəƑɜ

2.10, 2.37, 2.38, 2.43

- ($\alpha \leq 0.05$)
- ($\alpha \leq 0.05$) ($\alpha \leq 0.05$)
- ($\alpha \leq 0.05$)

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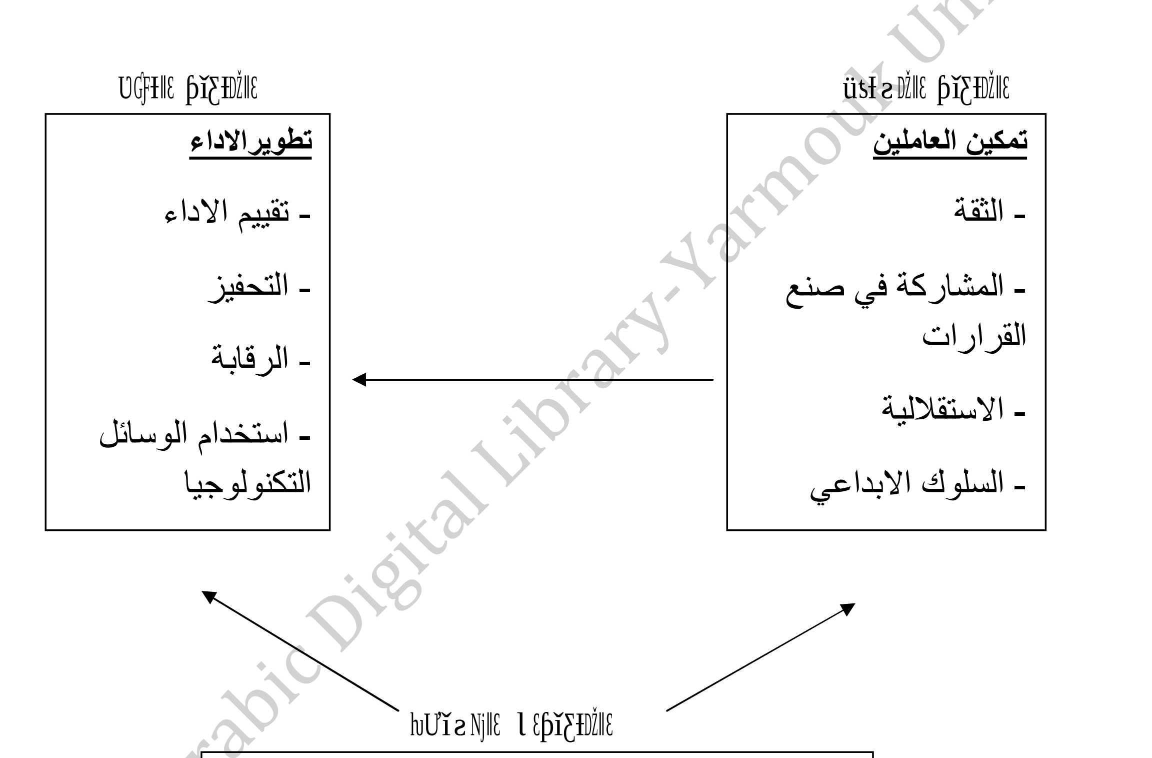
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[illegible] (2006 [illegible]).

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(1)



تمكين العاملين
- الثقة
- المشاركة في صنع القرارات
- الاستقلالية
- السلوك الابداعي
تطويرالاداء
- تقييم الاداء
- التحفيز
- الرقابة
- استخدام الوسائل التكنولوجيا
المتغيرات الديموغرافية والوظيفية:
الجنس، العمر، مدة الخدمة، المؤهل العلمي، المهنة

[illegible]

[illegible] :

[illegible]

[illegible] ([illegible]) [illegible]

.(1) [illegible] (11) [illegible] (3595) [illegible]

[illegible] (**1**)

[illegible]

[illegible]	[illegible]	[illegible]
1	[illegible]	223
2	[illegible]	336
3	[illegible]	343
4	[illegible]	445
5	[illegible]	215
6	[illegible]	471
7	[illegible]	255
8	[illegible]	229
9	[illegible]	327
10	[illegible]	352
11	[illegible]	399
	[illegible]	3595

[illegible] :[illegible].

: ƕʊƨƐƥƣǁƐ ƕƯǐƳ

ǈǙƯ ƗƪƒƧƥ!ƒ ƗǉǑƵ ƘǉǍƗƙ Ɨ ǒơ .ǋƧǍƗƦƯ!ƒ ƘǴƼƬƙƪƯ!ƒ Ǒƻ ǈǑǁƯǴƶǁ! ƗǁƛƯƯ ƗǑƑƒǍƬƵ ƗǉǑƵ ƧǴǑƤƥ Ɲƙ

ǋƥƧƙǙƪƯ!ƒ ƘǴǉǴƙƪǛƒ ƥƥƵ ǈǴƗǍ ǛƴǴƯƬ!ƒ Ưǒǁƥ Ǒƻ ǑƯǍƗơ ǏƽƬƙƪƯ (11) ǏǁƵ ǈǑƵƨǍƯ ǚƯǴƵ (562)

ƗǙǉǑƵ ƴǙǒƨǍƙ (2) ƴǍƥƞ ǈǑƲǑǍ .(%94) ƳǴƞƧƙƪƣ Ɨƕƪǉƕ ǑƑǴƮơǛƒ ƴǒǁơƙǁ! Ɨơ!ǴƮ ƗǉǴƙƪƣ (528)

.ƗƪƒƧƥ!ƒ

(**2**) ǜǊǋǁ

ƕʊƨƐƥƣǁƐ ƕƯǐƳ ƣƐƥʓ ǓǐƦǊƗ

ƕǴƨƯ ƱƑǁƥƗƨǛƐ	ƣƣƳ ǀƑƯƑǴƗƨǛƐ ƕƴǁƥƗƨǄǁƐ	ƣƣƳ ǀƑƯƑǴƗƨǛƐ ƕƳƦǊǄǁƐ	ǄǐǐƾƴǊǄǁƐ ƣƣƳ ǍƸƪƗƨǄǁƐ ǏƷ ǓǄƗǄǄ) (ƕʊƨƐƥƣǁƐ	ǍƸƪƗƨǄǁƐ ! ƨƐ	!ƽƥǁƐ
%91	41	45	223	ƥǒƕƵ ǍƕƒƂ	1
%88	30	34	336	ƗƯǒơƧ ǋƧǑƯǛƒ	2
%97	38	39	343	ƗƶǒƥƕƂ ǋƧǑƯǛƒ	3
%94	45	48	445	ƗƯƪƕ ǋƧǑƯǛƒ	4
%94	64	68	215	ƗǑƒƧ ǋƧǑƯǛƒ	5
%94	47	50	471	ǴƛƯƧ!ƒ	6
%93	56	60	255	ǁ ǍƯƧǒ!ƒ	7
%94	47	50	229	ƴƕƞ ǈƕ ƦǴƶƯ	8
%99	74	75	327	ǑƯǍƗơ!ƒ ƫ ƧƞƂ	9
%93	42	45	352	ǑƯǍƗơ!ƒ ƽƧƽƯ!ƒ	10
%92	44	48	399	ǑƯǍƗơ!ƒ ǈǴƯǒǛƒ	11
%94	528	562	3595	ƳǍƯƞƯ!ƒ	

ǶùǋƧŏĂƱƙĂ ǶǌǆǆǆǆƮǨǶ ǂƛơǶǶ!ƒ ƘǆǆǶ Ŏƙ!ƒĂ ǂŏ!ĂǕƒ ƘǶǇǶǶ!ƒ ƴǆƞ! ǇƒþǂǂǇǶƙƪǕƒ ĬǶƵ ǂƛơǶǶ!ƒ ƘþǆƙƵǫ

ƘǶùƪƒƧþ ƘǶǇǶƙùƪǫ ĬùǶƵ þǶùǆƙƵǕƒ ǅùƙ þùƥĂ .ǶǌƙǶŏù ư Ƨ5 ƧǶùƙƤǫĂ ǂƪƒƧþ!ƒ ǂǶƑƪǅ ĬǶƵ ǂǶǶƞǘ!

ǶùǌƙǶŏĂƙơǆ Ư ùƶǶ ƧŏĂùƱƙĂ (1999ǕƔĂlƶŏ)Ă Ǖ(2010 Ǖĭ ƧǌƬ) Ǖ(2010 Ǖýŏ̈Ƥ) (2011ǕǂǶǶƬǆ!ƒ)

:ŎǋǕǶƒƨƞǅ ǂƶǶƧǅ ĬǶƵ ĭĂƙơƙ ǂǇǶƙƪǕƒ ƘơǶƮǅ ǂŏơǶ ǶǌǶŏþƶƙĂ

- :üǋǕƐ ƀƦƜƐ

):ŎùǋĂ ǕǂùƪƒƧþ!ƒ ǂùǇŏƵ þƒƧ5Ǖ ǂŏ5ŏƱĂ!ƒĂ ǂŏƮƤƬ!ƒ ƘǶǇǶǶ!ƒ ǇǆưƙƙƘƒƧŏƺƙǆ (5) ĬǶƵ ĭĂƙơŏ

.(ǂǇǌǆ!ƒĂ ǕŎǆǶƶ!ƒ ýǋƋǆ!ƒ ǕǂǆþƤ!ƒ ǇþǆǕƧǆƶ!ƒ ǕΣǇƞ!ƒ

- :ĬǆƑƙƐ ƀƦƜƐ

ǂŏǆĂǂơ!ƒ ƘǶŏ5Ƭƙƪǆ!ƒ Ŏ5 ǇŏǶǆǶƶ! ǇŏǂǆƙǶ!ƒ ǂƪƧǶǆǆ ăĂƙƪǆ ΣǶƥ Ĭ!ǫ ƻþǌƙ ǇƧǀ5 (21) ĬǶƵ ĭĂƙơŏ

:ƘǕǶƞǆ ǂƶǶƧǅ ĬǶƵ ǂƵƨĂǆ Ǖ ýǶǆƬ!ƒ ǅŏǶƥǫ Ŏ5 ǂŏǇþƧǕƒ

1- ýǶƞǆ ǂƛ!ƒ ýǆƬŏĂ ƘƒƧǀ5!ƒ Ǉǆ (5-1).

2- ýǶƞǆ ǂǂƧǶƬǆ!ƒ Ŏ5 ƴǇƮ Ƙƒƨƒƨ!ƒ ýǆƬŏĂ Ƙƒƨǀ5!ƒ Ǉǆ (11- 6).

3- ýǶƞǆ ǂƪǕƒ ǂŏ!ǚlƙ ýǆƬŏĂ Ƙƒƨǀ5!ƒ Ǉǆ (16-12).

4- ýǶƞǆ ǂƪ!ƒ ǁĂƪ!ƒ ŎƵƒþǶǕƒ ýǆƬŏĂ Ƙƒƨǀ5!ƒ Ǉǆ (21-17).

- :ƘǁƑƙƐ ƀƦƜƐ

ǂùŏǆĂǂơ!ƒ ƘǶŏ5ùƬƙƪǆ!ƒ Ŏ5 ǇŏǶǆǶƶ!ƒ ǶƒþǅƧŏĂƱƙ ăĂƙƪǆ ΣǶƥ Ĭ!ǫ ƻþǌƙ ǇƧǀ5 (23) ĬǶƵ ĭĂƙơŏ

:ƘǕǶƞǆ ǂƶǶƧǅ ĬǶƵ ǂƵƨĂǆ ǕǇŏǶǆǶƶ!ƒ ƧƱǇ ǂǌƞĂ Ǉǆ ǂŏǇþƧǕƒ

.(27-22) ǇǞ ƘƒƧǀƼ!ƒ ýǻTŏĂ ƇƒƥǕƒ ǆŏŏǀƙ ýǤƞǻ - 1

.(33-28) ǇǞ ƘƒƧǀƼ!ƒ ýǻTŏĂ ƨŏƼơƙ!ƒ ýǤƞǻ - 2

.(38-34) ǇǞ ƘƒƧǀƼ!ƒ ýǻTŏĂ ƗƕǤƿƧ!ƒ ýǤƞǻ - 3

.(44-39) ǇǞ ƘƒƧǀƼ!ƒ ýǻTŏĂ ǊŏƞĂ!ĂǇǂƙ!ƒ ýƑǤƪĂ!ƒ ǆƒƥƤƙƪƍ ýǤƞǻ - 4

:ƕǤƑƜǕƐ ƖƑƖǋƗƨǅ ƍǏƍƟƗ

ŎùƙǃƒĂ ƗùƪƒƧƥ!ƒ ƗǇŏƵ ƥƒƧƽ ƗǀƼƒĂǻ ăĂƙƪǻ ƩǤŏƿ ƻƥƞǇǂ ŎƪǤǻƤ!ƒ ƘƧǂŏ! ƩǤŏǀǻ ƗƛơǤƕ!ƒ ƘǻƥƤƙƪƍ

ƗùƞƧƥƕ ƾùƼƒĂǻ ǛƗùŏ!ǤƵ ƗƞƧƥƕ ƾƼƒĂǻ Ǜƿƥƞ Ɨŏ!ǤƵ ƗơƧƥƕ ƾƼƒĂǻ) ƗǀƼƒĂǻ!ƒ ǇǞ ƘǤŏĂƙƪǻ ƩǻƤ ƘƪǂƵ

.(ƿƥƞ ƗŏǇƥƙǻ ƗƞƧƥƕ ƾƼƒĂǻ ǛƗŏǇƥƙǻ ƗƞƧƥƕ ƾƼƒĂǻ ǛƗƱƪĂƙǻ

ăĂƙùƪǻ : ƗùƼǀƤǻ!ƒ ƗùƕǤƞǕƒ ǋƑǤƙǇ! ƗŏƕǤƪơ!ƒ ƘǤƱƪĂƙǻ!ƒ ăĂƙƪǻ! ƘǤƑƼ ƗλǖƛƗ ǏǀƵ ƗƛơǤƕ!ƒ ƘƥǻƙƵƍ

:ŎǃǤƙ!ƒ ĂơǇ!ƒ ǏǀƵ ăĂƙƪǻ ýǂ ƔǤƪơ ǆƙƥƿĂ .ŎǃǤƵ ăĂƙƪǻ ǛƱƪĂƙǻ ăĂƙƪǻ ǛŎǇƥƙǻ:

1.333= 1-5 = ƩǤŏǀǻǀ! ǏǇƥǕƒ ƥơ!ƒ Ǉ ƩǤŏǀǻǀ! ǏǀƵǕƒ ƥơ!ƒ = ƗƑƼ!ƒ ýĂƱ

3 ƘǤƑƼ!ƒ ƥƥƵ

:(3) ýĂƥƞ Ŏƽ ǇŏƕǻĂǋ ǤǻǂƗ ƗƑƼ ýǂ ƩǤŏǀǻ ǇĂǂŏ ǀ!ƦƗǀƵ ƇǤǇƕĂ

(3) ǖǋǍǓ

ƕƨƐƥǍǓƐ ƖǕƑǓǅ ǋƟǻ ǅǏƙǋƟǤǅǓƐ ƅƐƥƐ ĂǂƳ !ǀƟǓƐ Ƨ ƑǏƨǅ

ƕǓƥǍǓƐ	ƖƑƯƨǋƗǅǓƐ
ƗŏǇƥƙǻ	2.333ǇǞ ýƿƒ -1
ƗƱƪĂƙǻ	3.666 ǇǞ ýƿ-2.333
ƗŏǃǤƵ	5-3.666

(SBSS

1 -

2 - (T-Test)

3 - (One- WayANOVA)

4 - (Multiple Regression)

5 -

6 -

ƕƨƐƥƣǁƐ ƔƐƣƈ Ƽƣ Ƭ

ǇǊùǆǎ ǇǊöǆǎǂơǆǎ Ƙǚ Ǐ ǁƵ (ǂǇǦǖǩǚǗƒ) ǂǚƒƨƥ!ƒ ǉƒƥǁ ƯƨƵ ýǘƤ ǇǊǆǎ ǐƨǋǦǓ!ƒ ǉƒƥǕƒ ƾƥƬ ǇǊǆǎ ƥǂǅǩ!ƒ ǄǨ

Ǒù5 ǄǋƨùǓǉ ƘǦùǌƞǍǍ Ǆùǌƒƒƨǁǂ5ƨƶǆǍ ǁǍǆƨǒ!ƒ ǂƶǆǦƞ Ǒ5 ƥǦƬǨƤǗƒ ǂǒǁǂ Ǒ5 ƩǒƨƥǨ!ƒ ǂƒǒǋ ǅǦ ư ƵǄ

ƻƦơ ǇǊǆǎ ǦǌǒǁƵ ǂǆƨƨǘ!ƒ Ƙǘǒƥƶǩ!ƒ ǅƒƨƞǫǍ Ǘǂǚƒƨƥ!ƒ Ƙƒƨǒƺǩǆǎ Ʃǅǒƥ Ǐ ǁƵ ǦǌǨƨƥƥ ǎƥǆǎ ǇǊǆǎ ƥǂǅǩǁ! ǦǌǨƒƨǀ5

(1) ǄùƥƧ) ƾùơǁǆǎ! ƴùƞƨǫ .ƔǍǁƱǆǎ! ƯƨƺǛ ƾǀơǨ Ǐǩơ ǦǌǒǁƵ ǉƥǦƨ!ƒ ǍǄ Ǧǌǉ!ƥƶǩ ǍǄ Ƙƒƨǀ5!ƒ Ưƶǁ!

.((2) ǄƥƧ ƾơǁǆǎ ýưǦ5Ǖƒ ǇǊǒǆǎǂơǆǎ!ƒ ǅǦǆǎǚǄǍ ǗǂǇǦǖǩǚǗƒ

ƕƨƐƥƣǁƐ ƔƐƣƈ ǉƒǦǨ

ǂùǚƒƨƥ!ƒ ǂùǇǒƵ ǁƨǦƤ ǇǊǆǎ ǂǒƵǘƱǨǚƒ ǂǇǒƵ Ǐ ǁƵ ǑǁƤƒƥ!ƒ ƾǦǚǨǗƒ ƔǦǚơ ǄǨ ǗǉƒƥǕƒ ƘǦǖƛ ǇǊǆǎ ƥǂǅǩǁ!

ǉǋùǋ ǄǒùƥƘơǍƒƨǨ ǂǒơ ǗƘǘǆǎǦƶǆǎ!ƒ ǉǋǋ ǇǊǒǒ (4) ýǍƥƞ!ƒǍ Ǘǅ5!ǄǁǦǇǍƨǂ ǂ!ƥǦƶǆǎ Ɣǚơ (40) ǦǋƥƥƵ

ǂƕùǚǦǇǆǎ Ɣǚǉ!ƒ ǉǋǋ ƘƨƕǨƵƒǍ (0.92-0.79)ǇǊƕ ǅǆǎ ǅƒƥǕƒ ƨǒǍƱǨ ƘǛǦƞǆǎǍ ǇǊǂǆǎǨ!ƒ ƘǛǦƞǆǎ! ƘǘǆǎǦƶǆǎ!ƒ

.ǂǚƒƨƥ!ƒ ǉǋǋ ƘǦǒǦƺ!

(4) ǗǋƣǁǄ

ƒƻǁƐ ƠƒǦǆǌƥǀ Ǐǂǁƣǁ ƼƒƨǂǗƐ ǗǄǅƒƴǄǅ

Ǐǂǁƣǁ ƼƒƨǂǗƐ	
0.79	ǂǀƛ!ƒ
0.90	Ƙƒƨƒƨǀ!ƒ ƴǉƬ Ǒ5 ǂǂƨǦƬǆǎ!ƒ
0.78	ǂǒ!ǘǀǨǚǗƒ
0.92	ǑƵƒƥƕǗƒ ǁǍǁǚ!ƒ
0.94	ýǂǂ ǇǊǒǂǆǎǨ!ƒ
0.93	ǅƒƥǕƒ ǄǒǒǀǨ
0.91	ƨǒ5ơǨ!ƒ
0.92	ǂƕǦƥƨ!ƒ
0.92	ǋǒƞǍ!ǍǇǂǨ!ƒ ýƒǦǚǍ!ƒ ǄƒƥƤǨǚǫ
0.96	ýǂǂ ǇǊǒǁǆǎǦƶ!ƒ ǅƒƥǄ ƨǒǍƱǨ

. 2013-2012

(4) (562) (528).

(2008

(1998

(Tan and Tan, 2000)

(1996

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] (2006) [illegible]

[illegible] (Cook and Hunsaker,2001) [illegible]

[illegible] (Goetsch and Stanley, 2000) [illegible]

[illegible] " (Bowen and Lawler,1992,1995) [illegible]

[illegible]

[illegible] (lashely,1999) [illegible]

[illegible]

[illegible] (Hellriegel et al,2001) [illegible]

[illegible]

[illegible] (Schermerhorn et al,1997) [illegible]

[illegible]

[illegible]

[illegible] (56 [illegible])

[illegible] (57 [illegible])

(Stirr,2003)

(Empower)

Education-1

Motivation -2

Purpose-3

Ownership-4

(3As)

Authority + Accountability = Achievement.

[illegible] Willingness to change -5

[illegible]

[illegible]

[illegible] Ego elimination-6

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] Respect -7

[illegible]

[illegible]

[illegible]

[illegible] :

[illegible]

:(2004 [illegible]) [illegible]

-1 [illegible] .

-2 [illegible] .

-3 [illegible] .

4 - [illegible] .

5 - [illegible].

6- [illegible] .

7- [illegible].

8- [illegible] .

9- [illegible].

10- [illegible]

[illegible].

11- [illegible].

12- [illegible].

[illegible]:

[illegible] (2006) [illegible]

[illegible]

[illegible]

[illegible] Empower [illegible]

[illegible]

.(Conger and kanungo,1988) [illegible]

(2006)

.(Malone,1997)

(Spretizer,1996)

.(Sims,1986)

(Torrington etal,2005) .(Rohstein,1995)

(2006)

-1

(Argyris, 1998)

(Browen and Lawler,1995)

(Neilson and Pederson,2003)

.(2006)

2 -

*

*

*

*

*

3 :

.(Bowen and Schneider,1993

(1)

مسؤولون عن عملية و استراتيجية اتخاذ القرار

يصنعون القرارات

يشاركون في القرارات

يقدمون المعطيات

ليس لهم مشاركة في صنع القرار

ادراة ذاتية فرق عمل ذاتية الادارة

العمل في صورة فريق

نظم لقياس الجودة و مجموعات مشاركة

برامج مقترحة

تعليمات قهرية

درجة التمكين

المهارت المطلوبة من الموظف

(1)

1 -

.(Bennis, 1995)

2 -

.(Kabeer,1999)

3 -

.(2006,

4 -

(1989)

[illegible]

[illegible] (2003 [illegible]) [illegible]

- [illegible]

[illegible]

- [illegible]

[illegible]

- [illegible]

- [illegible]

[illegible]

[illegible]

[illegible] (Brown,1993) [illegible] (2006 [illegible]

[illegible]

[illegible]

- [illegible]

[illegible]

[illegible]

- [illegible]

[illegible]

[illegible]

- [illegible]

[illegible]

[illegible]

2 -

(1994).

3 -

(1987).

4 -

ƀƐƣǓƐ ƥǇǋƯƗǋ ǊǒǇ ǊǍƗƐ :ƘƗƒƘƐ ƘƟǴǊƐ

ƨƒƥùǋǅ ƭùǑlơƙ ǋƙùǑ Ǐƙơ ƗǑǋǋǓƒ ƗǑǴƩ Ǒ5 ƧǊǅ ǴƒƥǕƒ ǍơǊ ǋǋǑƞǍƙǍ ǑǊǴƪǊǓƒ ǁǍǃƪ!ǴǕ ǊǴƙǋǓƒ Ǌƍ

ǊùƷƥ Ǐùǃƶ ǴǋƑƒƥ ýǋƶƙ Ǒƙ!ƒ Ǒǋ Ɨǒ!Ǵƶ!ƒ ƗǑǃƶǴ5!ƒ ƘƒƦ ƘǴǋƱǊǋ!ƒ Ƨǁƙƶƙ ǍǍ .Ɨǒ!ǴƵ ƗǑǃƵǴ5Ǎ ƖǴ5ƗǄ ƗǋƱǊǋ!ƒ

.(2010 Ü ĭ ƧǋT) ǴƒƥǕƒ ǍơǊ ǋǋǋǑƞǍƙǍ ǴǋǑ5 ǊǑǃǋǴƶ!ƒ ƥƒƧ5Ǔƒ ƥǊƵ ƗǑǁǴƞǑǓƒ ƘǴǑƗǍǃƪ!ƒ ƨǑ5ơƙǍ

ǴùǋƙǴƥǵ Ǐù Ƭƥǅ ƗǑƧùƬǁ!ƒ ƥƧƒǍùǋ!ƒ ǋƦǋ Ǌǋ ƜƨƤƙƪƙ Ǐƙơ ĭ ƧƒƥǗƒ ǊǑƗǋƙ!ƒ ƗǑǋǋǅ ǑƙǊƙ ǴǊǋ ǊǋǍ

ǴǋǊƍ ÜǊǑ5ƱǍǋ!ƒ ǊǑƗǋƙ! ƭǑƧƱ!ƒ ƒǍƥǋǋ ǊǑƦ!ƒ ýǴǋƷǓƒ ǴǴƪƋƧǍ ǊǍƧǑƥǋ!Ǵ5 .ǴǋƙǴƷƒƥǁƒ ý ư 5ǅ Ǐǃƶ ý ƬơƙǍ

.Ǵùǋlǒlơƙ ǊùƗǋǑ Ǔ ǋùǊƗ5 Ǘǒùƪƪƍǋ!ƒ ƨƒƥǋǓƒ Ǒ5 ǊǑǃǋǴƶ!ƒ ǁƒƧƬƒ ǊǍƥǁ ǋǊǋǁ ƒǍƗƧƥǅ ǋǋǊǓ ǁ!Ʀ ƒǍǃƶ5

) ƨƒƥǋǕƒ ǋƦǋ ƭǑlơƙ ýƞǅ Ǌǋ ƗƗƧƙƬǋ!ƒ ǋǋƥǍǋƞǍ ǋǋƙƒƧǁƤǍ ǋǋƙǴǋǍǃƶǋǍ ǋǋƙƒƧǴǋǋ Ǐ!ƒ ƜǴƙơƙ ƗǋƱǊǋ!Ǵ5

.(2003 Ü ĭ ƥǊ5ǅ

Ü(2012ýùǑǃP) ƘǴùƪƒƧƥ ýƛǋ ƗǑǁǊƞƒ ǋǅ ƗǑǁƧƶ ǴƒǍƪ ƗǁǴƪ!ƒ ƘǴƪƒƧƥ! Ǐǃƶ ƳǕƱǓƒ ýǕP ǊǋǍ

Ü(Ventura,2011) (2008ÜƔùǑƞǊ Ǌùǁ) Ü(2008Ü ĭ Ǎùǁ!ƒ) Ü(2009Ü Ʃ ǴǁƷǍ Ʃ ǑǊǅ) Ü(2011Üƚƥ!Ʒ)

ǊǑǁ ƗǑǁǴƞǑƍ ƗƥǕƷ ƥǍƞǍ ǴǋƞƑǴƙǊ ƘƧǋƱǅ ƥƥ (Harries et al,2009) Ü(Alsua,2002) Ü(Cho,2008)

.ǴƒƥǕƒ ƧǑǍƱƙ ăǍƙƪǋ ƥƒƨ ǊǑƗǋƙ!ƒ ăǍƙƪǋ ƥƒƨ ǴǋǃƗ ǋǊǅ ĭ ǅ ǴƒƥǕƒ ƧǑǍƱƙǍ ǊǑƗǋƙ!ƒ

(2011) -1

(2009) -2

(2009 -2008)

2- [illegible] (2011) [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] $(\alpha \leq 0.05)$ [illegible]

[illegible] $(\alpha \leq 0.05)$ [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

3- [illegible] (2010) [illegible]

[illegible]

[illegible]

[illegible]

(α≤0.05)

6- (2003)

1- (2012)

(α≤0.05)

(α≤0.05)

-1 (2011)

-2 (2010)

Ǒù5 Ŀùǒǜǒƨþǩ!ƒ Ŀǒǁǆž!ƒ ƨǒʅ ƽǒžǩ Ǒǩ!ƒ ý‡ǴŢǆž!ƒǍ ǗČƒþǕƒ ǏǁƵ Ɣǒƨþǩǁ! ĿǒþǴƮǩþǗƒǍ Ŀǒ‡ǍǁƖ!ƒǍ Ŀǒƨ‡ƨ!ƒ

lƨƒƨǍ Ǒù5 Ǉǒǁǆǵùž!ƒ Čƒþǅ ƨǒǍùƱǩ ǏǁƵ Ɣǒƨþǩ!ƒ ƨǒƛǩ ăǍǩƖǆ Ǉǵ‡ :ĿƖƨþ!ƒ ǊƑǴǩǉ ǅǊǅǍ .lƨƒƨǍ!ƒ

ĿùƖƒƨþ!ƒ Ŀǉǒ Ƶ ƨƲǉ ĿǌŋǍ Ǉǆ Čƒþ Ǖƒ ǏǁƵ Ɣǒƨþǩǁ! ĿǒþǴƮǩþǗƒ þǴžǜǕƒ ƨǒƛǩǍ ǷƱƖǍǩǆ Ŀǒþƒƨž!ƒ ĿơƮ!ƒ

Ǒù5 ĿǜƖǩ‡ǆ!ƒ ƘƒƨǴǌǆ!ƒǍ ƻƨǴžǆ!ƒ ƽǒǜƱǩ ƽǒžǩǍ ǈŋƒǍǩ ƘǴþǍžǆǍ ý‡ǴŢǆ þǍŋǍ ăǍǩƖǆǍ ǷƱƖǍǩǆ Ǉǵ‡

ǏùǁƵ Ɣǒƨþǩ!ƒ ƨƛǕ ǷǒƑǴƮơǫ Ŀ!ƒþ ƽǍƨ5 þǍŋǍ ǅþƵ Ǵưǒǅ ǇǒǜǩǍ .ĿƱƖǍǩǆ ĿŋƨþǇ Ǉǒ5ƲǍǆ!ƒ ýǆƵ ýǴŋǆ

ƽǴùƱǉ ǗǑùǆǒǁžǩ!ƒ Ǐǆù Ɩǆ!ƒ Ǘƨùǆž!ƒ ǗΣǉùŋ!ƒ) Ŀùǒ5ǒƲǍ!ƒǍ ĿǒƮƤƮ!ƒ Ƙƒƨǒƺǩǆǁ! ăƨžȝ Ǉǒǁǆǵž!ƒ Čƒþǅ

ǗǑ5ǒƲǍù!ƒ ăǍǩƖǆǁ! ăƨžȝ Ǉǒǁǆǵž!ƒ Čƒþǅ ǏǁƵ Ɣǒƨþǩ!ƒ ƨƛǕ ǷǒƑǴƮơǫ Ŀ!Ǖþ Ƙƒƻ ƽƨ5 ǁǴǉǊǍ .(Ƶ ƒƨƮǕƒ

ǷǒƑǴùƮơǫ Ŀ!Ǖþ Ƙƒƻ ĿǒǍǌ ĿǒǜǴŋǒǫ ĿǒƱǴǜƨǫ ĿǌǕƵ ǁǴǉǊǍ .ƵƲǍǆ!ƒ ǈǜ ýǆžǒ ǏƦ!ƒ ǅƖǀ!ƒ ǗĿǆþƤ!ƒ ƘƒǍǉƖ

lƨƒƨǍ Ǒù5 Ǉǒǁǆǵùžǁ! Ǒùǁ‡!ƒ ČƒþǕƒ ăǍǩƖǆǍ (ĿǒþǴƮǩþǗƒǍ Ŀǒ‡ǍǁƖ!ƒǍ Ŀǒƨ‡ƨ!ƒ) ČƒþǕƒ þǴžǜǅ ƵǁǩƤǆ Ǉǒǜ

.Ŀǒþƒƨž!ƒ ĿơƮ!ƒ

lƨƒƨǍ ƨùƑƒǍþ Ǒù5 Čƒƨþùǆǁ! ǖþƑǴùƖ!ƒ ĿǒþǴǁ!ƒ ƱǴǆǉǕƒ ƨƛǅ Ŀ5ƨžǆ Ǐ!ǫ Ƙ5þǉ (2010)ƨǜǴŋ ĿƖƒƨþ -2

Ǒ!Ǵùǩ!ƒ ǍơǉƗ!ƒ ǏǁƵ ĿǒþǴǁ!ƒ ƱǴǆǉǕƒ Ɣǒƨǩ :ǴǌŋƑǴǩǉ Ƙǉǵ‡Ǎ Ǘ Ǉǒǁǆǵž!ƒ ČƒþǅǍ ǴưƨƵ ǏǁƵ Ŀǒþƒƨž!ƒ ƱǒƱƤǩ!ƒ

Ʊùǆǉ ǗýǊǴùƖǩǆ!ƒ ƨǒþùǆ!ƒ Ʊǆǉ ǗǑƵǴǆǩŋǕƒ ǐþǴǉ!ƒ ƨǒþǆ Ʊǆǉ Ǘƽǒƨ5!ƒ ƨǒþǆ Ʊǆǉ ǗýþǩƵǆž!ƒ ƨǒþǆ!ƒ Ʊǆǉ)

ǇǒùơǑù5 ĿƱƖǍǩǆ ĿŋƨþǇ Ǉǵ‡ Ǉǒǁǆǵž!ƒ ăþ! Ǒ5ǒƲǍ!ƒ ǴưƨǁǶ ǅǴž!ƒ ăǍǩƖǆ ǇǅǴǆ‡ .(ǐǍƱǁƖ!ƒ ƨǒþǆ!ƒ

ăǍǩùƖǆ þùǉƵ ǴǒƑǴùƮơǫ Ŀù!þ ƽǍƨ5 þǍŋǍ ǅþƵǍ .Ŀǒ!ǴƵ ĿŋƨþǇ Ǉǵ‡ Ǒ5ǒƲǍ!ƒ Čƒþǖ! ǅǴž!ƒ ăǍǩƖǆ!ƒ

Ʊùǆǉ ČǴǉǍǩùƖǇǊ ǗƱǴùǆǉǕƒ ýǒǆŋ Ǒ5 Σǉŋ!ƒ ƨƛǕ ăƨžȝ ĿǒþǴǁ!ƒ ƱǴǆǉǖ! Ǉǒǁǆǵž!ƒ ǁƒƨþǫ Ǒ5 (α≤0.05)

ăǍǩùƖǆ þùǉƵ ǴǒƑǴùƮơǫ Ŀù!þ ƽǍƨù5 þǍŋǍ ǅþƵǍ . ĿǴǉǕƒ Ơ!ǴƮ! ƽǍƨ5!ƒ ƘǴǴŋǍ ǐǍƱǁƖ!ƒƨǒþǆ!ƒ

ČǴǉǍǩùƖǇǊ ǗƱǴǆǉǕƒ ýǒǆŋ Ǒ5 Ǒǆǁž!ƒ ýǊƋ!ƒ ƨƛǕ ăƨžȝ ĿǒþǴǁ!ƒ ƱǴǆǉǖ! Ǉǒǁǆǵž!ƒ ǁƒƨþǫ Ǒ5 (α≤0.05)

ăƨùžȝ ĿùǒþǴǁ!ƒ ƱǴùǆǉǖ! Ǉǒǁǆǵž!ƒ ǁƒƨþǫ Ǒ5 ǴǒƑǴƮơƒ Ŀ!þ ƽǍƨ5 þǍŋǍ ǅþƵǍ .ýǊǴƖǩǆ!ƒ ƨǒþǆ!ƒ Ʊǆǉ

Ǒù5 ǴǒƑǴùƮơǫ Ŀ!þ ƽǍƨ5 þǍŋǍ ǅþƵǍ . ǑƵǴǆǩŋǕƒ ǐþǴǉ!ƒ ƨǒþǆ ČǴǉǍǩƖǇǊ ƱǴǆǉǕƒ ýǒǆŋ! lƨǜƤ!ƒ ƨǒƺǩǆ!

Ŀù!þ ƽǍƨù5 þǍŋǍ ǅþƵ ǁ!Ǖ‡Ǎ .ƱǴǆǉǕƒ ýǒǆŋ Ǒ5 ƨǆž!ƒ ƨǒƺǩǆ! ăƨžȝ ĿǒþǴǁ!ƒ ƱǴǆǉǖ! Ǉǒǁǆǵž!ƒ ǁƒƨþǫ

[illegible]

3- [illegible] (2008) [illegible] (α≤0.05) [illegible]

4- [illegible] (2008) [illegible] (α≤0.05) [illegible]

-5 (2008)

(α≤0.05)

(α≤0.05)

-6 (1992)

(70)

[illegible]

1- [illegible] (2009 [illegible]) [illegible]

[illegible]

2- [illegible] (2008) [illegible]

[illegible]

(2008) -3

1- (Park,2011)

59

2- (Gardenhour,2008)

(600)

[illegible] (Turvey, 2006) [illegible] -3

[illegible]

[illegible] (Shelton,2002) [illegible] -4

[illegible]

[illegible]

[illegible] (Miller,2011) [illegible] -1

[illegible] .2007 [illegible]

[illegible]

[illegible]

[illegible] 14 [illegible] (corral,2009) [illegible] -2

[illegible]

[illegible] (Bo Hansson,2006) [illegible] -3

[illegible] (26) [illegible] (500) [illegible]

[illegible] (Savery and Luks, 2004) [illegible] -4

[illegible] (3867) [illegible]

5- (Pounder,2000) (231)

6- (Boyd,1997) (35) (%72)

1- (Ventura,2011)

133

-2 (Harries et al;2009)

-3 (Cho,2008)

-4 (Alsua,2002)

208

208 624

208 208

[illegible]

[illegible]

[illegible]

[illegible]

(528) [illegible]

[illegible] (5) [illegible]

[illegible]

(5) [illegible]

(528=[illegible]) [illegible]

[illegible]	[illegible]	[illegible]	
49.5	261	[illegible]	[illegible]
50.5	266	[illegible]	
24.1	127	[illegible] 30	[illegible]
42.7	225	[illegible] 31-40	
25.0	132	[illegible] 41-50	
8.2	43	[illegible] 51	
21.4	113	[illegible] 5	[illegible]
20.5	108	[illegible] 6-10	
21.8	115	[illegible] 11-15	
36.2	191	[illegible] 16	
42.7	225	[illegible]	[illegible]
41.0	216	[illegible]	
7.4	39	[illegible]	
3.2	17	[illegible]	
5.7	30	[illegible]	
18.6	98	[illegible]	[illegible]
40.2	212	[illegible]	
19.4	102	[illegible]	
21.8	115	[illegible]	
100.0	528	[illegible]	

ƛDžǪǁǁƐ ǫyǴ ǏDžǂyǁǁƐ üǉƊDžǁǁƐ ǀƐƥǏƸǂDžǁǁ ƕǏǋǝDžǁǁƐ ƒ ƨǽǁǁƐǋ ǀƐƥƐƥǀǂǁǁƐ

(6) üǋǫǁǁ

(528=Dž) ǈǂƑǝƺ ƛDžǪ ǫyǴ ǏDžǂyǁǁƐ üǉƊDžǁǁƐ ǀƐƥǏƸǂDžǁǁ ƕǏǋǝDžǁǁƐ ƒ ƨǽǁǁƐǋ ǀƐƥƐƥǀǂǁǁƐ

ƕǴ ƨǽǁǁƐ	ƥƐƥǀǂǁǁƐ	ǀƑǝƸǁǁƐ	
48.4	255	ýƥƌ5 DžĂǁǁƕƥ	ǏDžǂyǁǁƐ üǉƊDžǁǁƐ
41.0	216	ƩĂǒƧĂ!Ǵǂƕ	
10.6	56	ǴǒǁƵ ƘǴƪƒƧƥ	
100.0	527	ƳĂǆǝǆ!ƒ	

:ǑƽǒưĂĂ ǑƮƤƬ ƧǒƺǩǆýǂƔƪơǂƪƒƧƥ!ƒǂǉǒƵýǒƨĂǩǂƛơǴƕ!ƒǈǑǆǩƪ5ǈǓƒǴǆƊ

: Ƨ ǽǁǁǁƐ

ǈǗùǆ (%49.5) ƘƺǁǁƕǂǒĂƑǆǂƕƪǈƕĂǖǆǴƵ (261) ƸǁǁƕƧĂǂƦ!ƒƥƥƵǈƊ (5) ǆƥƧýĂƥƞ!ƒǈǆƱơǕǒ

ƥƒƧù5ƊǈǗùǆ (%50.5) ƘƺǁǁƕǂǒĂƑǆǂƕƪǈƕĂǂǁǆǴƵ (266) ǂǴǉǕƒƥƥƵƸ!ǴƕǈǒơǑ5ÜǂƪƒƧƥ!ƒǂǉǒƵƥƒƧ5Ɗ

.ƧĂǂƦ!ƒƥƥƵƕǂǉƧǴǀǆ ǂǴǉǓƒǈǆǈǒǁǆǴƶ!ƒƥƥƵƳǴƽǩƧƹǏ!ƒƧǒƬǒǴǆǆÜǂƪƒƧƥ!ƒǂǉǒƵ

:ƥDžyǁǁƐ

(%24.1) ǂùǒĂƑǆǂƕƪǈƕĂÜ(127) Ƹǁǁƕƥƿ(ýƥƌ5ǂǉƪ 30) ǂǒƧǆƶ!ƒǂƑ5!ƒǈǆǈǒǁǆǴƶ!ƒƥƥƵǈƊƱơǕǒ

ǂƕùƪǈƕĂǖǆǴùƵ (225) (ǂǉƪ 31- 40) ǂǒƧǆƶ!ƒǂƑ5!ƒǈǆǈǒǁǆǴƶ!ƒƥƥƵƸǁǁƕǆǂÜǂƪƒƧƥ!ƒǂǉǒƵƥƒƧ5Ɗǈǆ

(ǂǉùƪ 41-50) ǂùǒƧǆƶ!ƒǂƑ5!ƒǈǆǈǒǁǆǴƶ!ƒƥƥƵƸǁǁƕǴǆǂÜǂƪƒƧƥ!ƒǂǉǒƵƥƒƧ5Ɗǈǆ (%42.7) ǂǒĂƑǆ

ǂǒƧǆƶ!ƒǂƑ5!ƒǈǆǈǒǁǆǴƶ!ƒƥƥƵƸǁǁƕǴǆǂÜǂƪƒƧƥ!ƒǂǉǒƵƥƒƧ5Ɗǈǆ (%25.0) ǂǒĂƑǆǂƕƪǈƕĂǖǆǴƵ(132)

ǋǩƕùƪǉǴùǆǈƊǑùǉƶǒƒƦùǋĂÜǂƪƒƧƥ!ƒǂǉǒƵƥƒƧ5Ɗǈǆ (%8.2) ǂǒĂƑǆǂƕƪǈƕĂǖǆǴƵ (43) (ƧƛǂǴ551)

.ǂǒǩ5!ƒǂǒƧǆƶ!ƒƘǴƑ5!ƒǈǆǈǒǁǆǴƶ!ƒǆƱƶǆǈƊǏǁƵýƥǒǴǆǆÜǂǉƪ (40) ǈƵǆǋƧǴǆƵƊýǀǩ (%66.8)

[illegible]

[illegible] : [illegible].

[illegible] ([illegible]) [illegible].

(7) [illegible]

[illegible] (528=[illegible]) [illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	.85	3.30	[illegible]	1	1
[illegible]	.86	2.82	[illegible]	3	2
[illegible]	.95	2.62	[illegible]	2	3
[illegible]	1.02	2.24	[illegible]	4	4
[illegible]		2.74	[illegible]		

[illegible] (7) [illegible] .(2.74) [illegible] (3.30-2.24) [illegible] (3.30) [illegible] (2.82) [illegible] (2.62) [illegible]

[illegible] (2.24) [illegible]

[illegible] (1.02-.85) [illegible]

[illegible]

[illegible]

[illegible] (3.30) [illegible] (8) [illegible]:

(8) [illegible]

[illegible] **(528**=[illegible])

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	.91	3.94	[illegible]	1	1
[illegible]	1.11	3.50	[illegible]	2	2
[illegible]	1.24	3.33	[illegible]	3	3
[illegible]	1.14	3.29	[illegible]	4	4
[illegible]	1.26	2.44	[illegible]	5	5
[illegible]		3.30	[illegible]		

[illegible] (3.94 - 2.44) [illegible] (8) [illegible] (1) [illegible] (3.94) [illegible] (5) [illegible] (2.44) [illegible]

ﻝ ﯿﻠﻠﺤﺘﻟﺍ ﺞﺋ ﺎﺘﻧ :ﻲﻧﺎﺜﻟﺍ ﻝﺍﺅﺴﻟﺍ

Ʊƿ Ăƙdž ăĂƙƿdžƞĂ (2.62) ŎƞƇƿơ Ʊƿ ĂƙdžƞĂ Ɨƛ!ƇƗ!ƒ ƗƞƙƧdž!ƒ Ŏ5 ƘƒƧƒƧl!ƒ yǃƬ Ŏ5 ƗǂƧƇƬdž!ƒ þƶƞ ƇƇƞ

:(9) ýĂþƞ!ƒ ǇŎƞŏ Ƈdžǂ

(9) ﻝﻭﺪﺠﻟﺍ

ﺐﺗﺮﻣﺔﻠﺟ ﻞﻴﻠﺤﺘﻟﺍ ﺞﺋﺎﺘﻧ ﻲﻓ ﺕﺍﺭﻮﻘﻔﻟﺍ ﺔﻴﺑﺎﺴﺤﻟﺍ ﻂﺳﺎﻮﺘﻤﻟﺍ ﺔﻳﺭﺎﻴﻌﻤﻟﺍ ﺕﺎﻓﺍﺮﺤﻧﻻﺍ

(**528**=Dž) ﺔﻴﺑﺎﺴﺤﻟﺍ ﻂﺳﺎﻮﺘﻤﻟﺍ ƒ ƨΘ

ﺔﺟﺭﺪﻟﺍ	ﻑﺍﺮﺤﻧﻻﺍ ﻱﺭﺎﻴﻌﻤﻟﺍ	ﻂﺳﻮﺘﻤﻟﺍ ﻲﺑﺎﺴﺤﻟﺍ	ﺓﺮﻘﻔﻟﺍ	ﻢﻗﺮﻟﺍ	ﺔﺒﺗﺮﻟﺍ
Ʊƿ Ăƙdž	1.09	2.88	[illegible]	9	1
Ʊƿ Ăƙdž	1.10	2.83	[illegible]	8	2
Ʊƿ Ăƙdž	1.20	2.64	[illegible]	10	3
Ʊƿ Ăƙdž	1.18	2.53	[illegible]	7	4
Ʊƿ Ăƙdž	1.19	2.51	[illegible]	11	5
Ƣ5Ƥǉdž	1.20	2.31	[illegible]	6	6
Ʊƿ Ăƙdž		2.62	[illegible]		

[illegible] (2.88-2.31) [illegible] (9) ýĂþƞ!ƒ ǇŎƞŏ Ƈdžǂ

[illegible] (9) [illegible]

[illegible] (2.88) [illegible]

[illegible]

[illegible] (6) [illegible]

[illegible] (2.31) [illegible]

[illegible]

.[illegible]

[illegible]

[illegible] (2.82) [illegible] :(10)

(10) [illegible]

[illegible] (**528**=[illegible])

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1.14	3.24	[illegible]	14	1
[illegible]	1.15	2.86	[illegible]	15	2
[illegible]	1.16	2.81	[illegible]	12	3
[illegible]	1.26	2.62	[illegible]	16	4
[illegible]	1.18	2.58	[illegible]	13	5
[illegible]		2.82	[illegible]		

[illegible] (3.24-2.58) [illegible] (10) [illegible] (14) [illegible] (3.24) [illegible] (13) [illegible] (2.58) [illegible]

[illegible]

[illegible] (2.24) [illegible]

:(11) [illegible]

(11) [illegible]

[illegible] (**528**=[illegible])

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1	18	[illegible]	2.41	1.18	[illegible]
2	17	[illegible]	2.40	1.18	[illegible]
3	21	[illegible]	2.31	1.19	[illegible]
4	20	[illegible]	2.13	1.15	[illegible]
5	19	[illegible]	1.94	1.12	[illegible]
		[illegible]	2.24		[illegible]

[illegible] (11) [illegible] (2.41-1.94) [illegible] (18) [illegible] (2.41) [illegible] (19) [illegible] (1.94) [illegible]

lƑĭ2øʅǂƨDžǁƐ Ĭøƺ hʋø2ǂǇʠǀDžǁƐ LJǀʠƑøƴǴǴ DžĭǂDžƑƴǁƐ ƋƐǫƈ βĭNjƲǂǁ Ʊ ƨNjǂDž njNjǂƨDž ƿƑǂǀj : hʋĭǂƑkǁƐ hʋĭƮβ2ǁƐ

.üƑDžʅǁƐ !ĭǂ5ƌ Ĭƺ hʋĭǂʠβǛƐ hʋĭDžNjǀƟǁƐ

ƧŏĂƱk ǎĂkʅdž! ǂŏƧǴŏƶdž!ƒ ƘǴ5ƒƧơǀǛƒĂ ǂŏhǴʅơ!ƒ ƘǴƱʅĂkdž!ƒ ǁƒƧƤkʅƒ Džk ǂŏƲƧ5!ƒ ljŖNj ǂơƮ ƧǴhkƤǛ

Ŏù5 (ƨùŏ5ơk!ƒĂ Üǂùhǀʠ pƧ!ƒ ÜNJùŏɳĂ!Ăǀjǂk!ƒ ýƑǴʅĂ!ƒ DžƒβƤkʅƍ ÜƇƒβǛƒ Džŏŏlk) ǂ5ǀkƤdž!ƒ ljβǴƶhʋǀ LJŏǀdžǴƶ!ƒ ƇƒβD

. ǁ !Ŗ ƠƲĂŏ (12) ýĂβɳ!ƒĂ ÜǴnjʋ LJŏǀdžǴƶ!ƒ ƧUlj ǂnjɳĂ LJdž ǂŏdžĂǂơ!ƒ ƘǴŏ5Tkʅdž!ƒ

.(2.32) ŎhǴʅơ Ʊʅ ĂkdžhĂ ǴƲ5Ƥljdž LJǴǂ LJŏǀdžǴƶ!ƒ ƇƒβD ƧŏĂƱk! DžǴƶ!ƒ ǎĂkʅdž!ƒ LJD (12) ýĂβɳ LJŏhŏ

(**12**) üNjʠǁ

hʋĭDžNjǀƟǁƐ lƑĭ2ʅǂƨDžǁƐ Ĭƺ DžĭǂDžƑƴǁƐ ƋƐǫƈ βĭNjƲǂ njNjǂƨDžǁ hʋĭβƑĭƴDžǁƐ lƑƺƐβƟǀǛƐNj hʋĭǴƑƨƟǁƐ lƑƲƨNjǂDžǁƐ

(**528** =Dž) hʋĭǴƑƨƟǁƐ lƑƲƨNjǂDžǁƐ ƒƨƟ ƑĭǁŖƑǀǂ hʋǴǂβDž DžĭǂDžƑƴǁƐ βƲǀ hʋNJǁǁNj DžDž

njNjǂƨDžǁƐ	ƺƐβƟǀǛƐ ǎβƑĭƴDžǁƐ	ƲƨNjǂDžǁƐ ĬǴƑƨƟǁƐ	üƑǁDžǁƐ	!5βǁƐ	hʋǴǂβǁƐ
Ʊʅ Ăkdž	1.00	2.43	ƇƒβǛƒ Džŏŏlk	1	1
Ʊʅ Ăkdž	1.01	2.38	NJŏɳĂ!Ăǀjǂk!ƒ ýƑǴʅĂ!ƒ DžƒβƤkʅƍ	4	2
Ʊʅ Ăkdž	1.02	2.37	ǂhǴpƧ!ƒ	3	3
Ʊ5Ƥljdž	.95	2.10	ƨŏ5ơk!ƒ	2	4
Ʊ5Ƥljdž		2.32	ýǂǂ LJŏǀdžǴƶ!ƒ ƇƒβD ƧŏĂƱk		

ƘùơĂƒƧk βùp LJŏǀdžǴƶ!ƒ ƇƒβD ƧŏĂƱk ƘǛǴɳdž ǎĂkʅdž! ǂŏhǴʅơ!ƒ ƘǴƱʅĂkdž!ƒ LJD (12) ýĂβɳ!ƒ LJŏhŏ Ǵdžǂ

ýǴùɳdž ƇǴɳ ǂŏơ ÜǴƲ5Ƥljdž LJǴǂ5 ƨŏ5ơk!ƒ ýǴɳdž ƒβƵǴdž ǎĂkʅdž!ƒ ǂƱʅĂkdž ǴnjƶŏdžɳĂ (2.43-2.10) LJŏhǴdž

DžƒβƤkʅƒ ýǴɳdž ǂŏljǴʎ!ƒ ǂhkƧdž!ƒ Ŏ5 ljǛk Ü(2.43) ƸǀǀhʋŎhǴʅơ Ʊʅ Ăkdž ĬǀƵǀhʋĬ!ĂǛƒ ǂhkƧdž!ƒ Ŏ5 ƇƒβǛƒ Džŏŏlk

ŎhǴʅơ Ʊʅ Ăkdžhʋǂhǀʠ pƧ!ƒ ýǴɳdž ǂʎ!Ǵʎ!ƒ ǂhkƧdž!ƒ Ŏ5 ljǛk Ü(2.38) ƸǀǀhʋŎhǴʅơ Ʊʅ Ăkdžhʋǂŏɳ Ă!Ăǀjǂk!ƒ ýƑǴʅĂ!ƒ

ƧŏùTŏ Ǵùdžǂ .(2.10) ƸùǀǀhʋŎhǴʅơ Ʊʅ ĂkdžhĂ lƧŏƤǛƒ ǂhkƧdž!ƒ Ŏ5 ƨŏ5ơk!ƒ ýǴɳdž ƇǴɳ Ǵdžljŏhʋ Ü(2.37) Ƹǀǀhʋ

ǂljŏƶ!ƒ βƒƧ5D ƘǴhǴɳƍ LJŏhʋ Ƨŏhʋǂ!ƒ ƔƧǴlk!ƒ ĬǀƵ LJŏǀdžǴƶ!ƒ ƇƒβD ƧŏĂƱk ƘǛǴɳdž Ŏ5 ĭƧǴŏƶdž!ƒ ƻƒƧơǀǛƒ Ŏljβk

Ʊù5Ƨ Ĭ!ƒ ƧŏTk ǂɳŏkǀj!ƒ ljŖNjĂ .(1.00-.95) LJŏhǴdž ǂŏƧǴŏƶdž!ƒ ƘǴ5ƒƧơǀǛƒ ƘơĂƒƧk ǂŏơ LJŏ5UĂdž!ƒ LJdž

.ǂŏljǴʎ!ƒ ǂŏƲƧ5!ƒ

ĬùǀƵ ǂùʅƒƧβ!ƒ ǂùljŏƵ βƒƧ5D ƘƒƧŏβlk! ǂŏƧǴŏƶdž!ƒ ƘǴ5ƒƧơǀǛƒĂ ǂŏhǴʅơ!ƒ ƘǴƱʅĂkdž!ƒ ƔǴʅơ Džk βpĂ

:Ŏ!Ǵk!ƒ ĂơǀĴ!ƒ ĬǀƵ ƘljǴǂ ǂŏơ ÜǎβơĬǀƵ βƶhʋýǂ Ƙƒƨl5

[illegible]

[illegible] (2.43) [illegible]

:(13) [illegible]

(13) [illegible]

[illegible]

(528=[illegible]**)** [illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1.17	2.63	[illegible]	22	1
[illegible]	1.09	2.53	[illegible]	23	2
[illegible]	1.13	2.50	[illegible]	24	3
[illegible]	1.17	2.39	[illegible]	27	4
[illegible]	1.17	2.32	[illegible]	25	5
[illegible]	1.20	2.18	[illegible]	26	6
[illegible]		2.43	[illegible]		

-2.18) [illegible] (13) [illegible] (2.63 [illegible] (26,25) [illegible] (1.20-1.17) [illegible] (22) [illegible] (2.63) [illegible] (26) [illegible] (2.18) [illegible]

[illegible]

[illegible] (2.10) [illegible]

: (14) [illegible]

(14) [illegible]

[illegible]

(528=[illegible]**)** [illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1.17	2.30	[illegible]	29	1
[illegible]	1.19	2.27	[illegible]	30	2
[illegible]	1.17	2.13	[illegible]	31	3
[illegible]	1.12	2.05	[illegible]	28	4
[illegible]	1.10	1.93	[illegible]	32	5
[illegible]	1.05	1.90	[illegible]	33	6
[illegible]		2.10	[illegible]		

-1.90) [illegible] (14) [illegible]

[illegible] (2.30 [illegible]

[illegible] (1.19 -1.05) [illegible]

[illegible] " [illegible] (29) [illegible]

[illegible] (33) [illegible] (2.30) [illegible] " [illegible]

[illegible] (1.90) [illegible] "[illegible]"

[illegible]

.[illegible]

[illegible]

[illegible] (2.37) [illegible]

:(15)[illegible]

(15) [illegible]

[illegible]

(528=[illegible])

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1.16	2.50	[illegible]	34	1
[illegible]	1.17	2.42	[illegible]	38	2
[illegible]	1.16	2.41	[illegible]	37	3
[illegible]	1.14	2.31	[illegible]	35	4
[illegible]	1.18	2.20	[illegible]	36	5
[illegible]		2.37	[illegible]		

-2.20) [illegible] (15) [illegible] (2.50 [illegible] (1.18 -1.16) [illegible] (34) [illegible] (2.50) [illegible] (36) [illegible] (2.20) [illegible]

[illegible] (2.38) [illegible]

:(16) [illegible]

(16) [illegible]

[illegible]

(**528**=[illegible]) [illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1.18	2.50	[illegible]	42	1
[illegible]	1.13	2.49	[illegible]	41	2
[illegible]	1.18	2.39	[illegible]	43	3
[illegible]	1.25	2.34	[illegible]	44	4
[illegible]	1.18	2.30	[illegible]	39	5
[illegible]	1.13	2.25	[illegible]	40	6
[illegible]		2.38	[illegible]		

[illegible] (16) [illegible] (1.18-1.13) [illegible] (2.50-2.25) [illegible] (42) [illegible] (40) [illegible] (2.50) [illegible] (2.25) [illegible].

[illegible] (α≤0.05) [illegible]

[illegible]

.([illegible])

[illegible]

.1 [illegible]

[illegible] (T-Test) [illegible]

: [illegible] (17) [illegible]

(17) [illegible]

[illegible]

(528=[illegible]) [illegible]

[illegible]	[illegible]	[illegible]		[illegible]		
		[illegible]	[illegible]	[illegible]	[illegible]	
.095	-1.674	.78	3.36	.91	3.24	[illegible]
.757	-.310	.90	2.63	.99	2.60	[illegible]
.142	1.470	.84	2.77	.89	2.88	[illegible]
.585	.546	.96	2.21	1.08	2.26	[illegible]
.986	.017		2.74		2.74	[illegible]

[illegible] (α≤0.05) [illegible] (17) [illegible]

.[illegible]

[illegible]

.[illegible]

.2 ƥDžƴƆƫ

ƘǴǒǊùŢƙƔǆǆȥ!ƒ Ǒ5 ǈǑǂǆǆǩ!ƒ ƘǕǤƞǆ Ǐǀ Ƶ (One- Way ANOVA) ǐƥǤơǙƒ ǈǑǤǆǩ!ƒ ýǒǆơǩ ƽǒǒƱƙ Ǆǩ

: ǁ!Ʀ ǈǑǒǒ (18) ǄǂƧ ýǍƥƞ!ƒǍ ǕƧǆƶ!ƒ ƧǒƺǩǆǞ! ǅƶǒǩ ǂǒǉƥƧǙƒ ǂǒǆǍǂơ!ƒ

(18) üǇǋǁ

Ǐƺ ǈǂǕƑǁǄǁǇ ǄǏǏǄǂǁ ǋǇǂƨǄǁ ǎǋƑƟǕƐ ǄǏƑǄǂǁ üǏǂƟǂǇ ǆǏƥƑǏƴǄǁ ƖƑƺƐƥƟǕƐǇ ǆǏǤƑƨƟǁ ƖƑƯƨǇǂǄǁ

(**528**=Ǆž)ƥǄžƴƆƐ ƥǏƸǂǄǁ ƑƴǤǂ ǆǏǄǍǇǁƟǁƐ ƖƑƺƔǂƨǄǁ

ǆǁǕǉǁƐ ǆǏǂƑŢƟǕƐ	ƺ ǆǄǏƽ	**51** ƥǩǀƑƺ		**41-50** ǆǆƨ		**31-40** ǆǆƨ		**30** üƽƻƺ ǆǆƨ		
		ƺƐƥƟǆǕƐ ǎƥƑƴǄǁƐ	ƯƨǇǂǄǁƐ ǏǤƨƟǁƐ	ƺƐƥƟǆǕƐ ǎƥƑƴǄǁƐ	ƯƨǇǂǄǁƐ ǏǤƨƟǁƐ	ƺƐƥƟǆǕƐ ǎƥƑƴǄǁƐ	ƯƨǇǂǄǁƐ ǏǤƨƟǁƐ	ƺƐƥƟǆǕƐ ǎƥƑƴǄǁƐ	ƯƨǇǂǄǁƐ ǏǤƨƟǁƐ	
.008	3.953	.74	3.59	.84	3.42	.86	3.26	.84	3.15	ǂǀǁ!ƒ
.001	5.339	.91	3.09	.95	2.70	.96	2.57	.88	2.46	Ǒ5 ǂǂƧǤŢǆ!ƒ ƴǇŢ ƘƒƧƒƧ!ƒ
.000	11.987	.75	3.43	.86	2.98	.83	2.67	.86	2.73	ǂǒ!ǔǀǩƔǕƒ
.000	7.376	.94	2.81	1.07	2.38	.95	2.11	1.03	2.11	ǁ ǍǆƔ!ƒ ǑƵƒƥǆǕƒ
.000	9.080		3.22		2.86		2.65		2.61	ý ǂǂ ǈǑǂǆǆǩ!ƒ

ƧǒƥǀǩǑ5 ($\alpha \leq 0.05$) ǂ!ǕƥƒǎǍǩƔǆ ƥǈƵ ǂǒƑǤŢơǫ ǂ!ǕƥƘƒƦ ƽǍƧ5 ƥǍƞǍ (18) ýǍƥƞ!ƒ ǈǆǆ ǈǑǒǩǒ

ƧǒŢǩ ǂƞǒǩǈ!ƒ ǈǋƦǇǍ Ǖý ǂǂ ǈǑǂǆǆǩ!ƒ ǑƼǍ ƘǕǤƞǆ!ƒ ƴǒǆƞ Ǒ5 Ƨǆƶ!ƒ ƧƛǕ ǎƨƶǩ ǈǑǂǆǆǩ!ƒ ǎǍǩƔǆ! ǈǑǚǍơǆǆ!ƒ

.ǇǩǕǤƞǆ ƴǒǆƞ ǑƼǍ ý ǂǂ ǈǑǂǆǆǩ!ƒ ǎǍǩƔǆ Ǒ5 ǂǒƣƧ5!ƒ Ư5Ƨ Ǐ!ƒ

ǂùǒƥƶǆ!ƒ ƘǤùǈƧǤǀǆ!ƒ ǄƒƥƤǩùƔƒ ǄùǩǂǒǤƔơ!ƒ ƘǤƱƔǍǩǆ!ƒ ǈǑǆǤƑǤŢơǫ ǂ!ƒƥ!ƒ ǂǒƞǍƨ!ƒ ƽǍƧ5!ƒ ǈǤǒ!Ǎ

.(19) ýǍƥƞ!ƒ Ǒ5 ǈǑǒǆǆ ǍǇ Ǥǆǂ (Scheffe) ǇǑ5Ţ ǂǀǑƧƱǆ

(19) üŇǬƜ

ƕřĎŽŇǰǀƟƜ ƖƑƑ2ƪƗƨĎƜ Ĭƺ ĎžƗĎƑƴƜ ƖƑǰƑƜƜ ĂƗƳ ƥĎžƴƜ ƥƙŬ ƕř2ƪ ƕšřƥƯƓ ƕřǭƴƓƜ ƖƑžƥƑšĎƜ

(**528**=Ďž)ƕřǭƥŰƐ

ƥƙǀƑƺ **51**	**-41 50** ƕǆƨ	**40-31** ƕǆƨ	ƕǆƨ **30** üƽĎƺ	ƯƨŇĐĎƜ ĬƓƑƨƟƜ		
				3.15	ýƿƎ Ɨǰƪ 30	Ɨǀƙ!ƒ
			.11	3.26	Ɨǰƪ 40-31	
		.15	.26	3.42	Ɨǰƪ 50-41	
	.17	.33	.43*	3.59	ƧƛƗƓ 51	
				2.46	ýƿƎ Ɨǰƪ 30	ƘƒƧƒƧǀ!ƒ ỵǰƬ Ŏƽ ƗƗƧƓƬǆ!ƒ
			.11	2.57	Ɨǰƪ 40-31	
		.13	.24	2.70	Ɨǰƪ 50-41	
	.39	.51*	.63*	3.09	ƧƛƗƓ 51	
				2.73	ýƿƎ Ɨǰƪ 30	Ɨő!ǔǀƙƪŰƒ
			.06	2.67	Ɨǰƪ 40-31	
		.31*	.25	2.98	Ɨǰƪ 50-41	
	.45*	.76*	.70*	3.43	ƧƛƗƓ 51	
				2.11	ýƿƎ Ɨǰƪ 30	ŎƵƒƥƕŰƒ ǁĂǀƪ!ƒ
			.00	2.11	Ɨǰƪ 40-31	
		.27	.27	2.38	Ɨǰƪ 50-41	
	.43	.70*	.69*	2.81	ƧƛƗƓ 51	
				2.61	ýƿƎ Ɨǰƪ 30	ýƗƗ ǇőƗǆƙ!ƒ
			.04	2.65	Ɨǰƪ 40-31	
		.21	.25	2.86	Ɨǰƪ 50-41	
	.36	.57*	.61*	3.22	ƧƛƗƓ 51	

.(**α≤ 0.05**) ƕǁŰǬƜ ǌŇƗƨĎ ǬǆƳ ƕǀƐǬ*

:ŎƙŬƒ (19) ýĂƥƞ!ƒ Ǉǆ Ǉőƕƙő

- ƘƓùƞĂ ÜƧƛƗƎùƽ 51Ă ýùƿƎ Ɨǰƪ 30ƧǆƵ!ƒ ŎƙƑƽ Ǉőƕ (α≤0.05) ƗőƑƓƬƠƍ Ɨ!Űƥ ƘƒƦ ƫĂƧƽ ƥĂƞĂ
.Ɨǀƙ!ƒ ýƓƞǆ Ŏƽ ƧƛƗƎ 51 ƧǆƵ!ƒ ƗƑƽ Ơ!ƓƬ! ƫĂƧƽ!ƒ

- ŎùƙƑƽ Ǉùǆ ýùƗĂ ƗùǌƞǇǆ ƧƛƗƎƽ 51ƧǆƵ!ƒ ƗƑƽ Ǉőƕ (α≤0.05) ƗőƑƓƬƠƍ Ɨ!Űƥ ƘƒƦ ƫĂƧƽ ƥĂƞĂ
Ŏùƽ .ƧƛƗƎùƽ 51 ƧǆƵ!ƒ ƗƑƽ Ơ!ƓƬ! ƫĂƧƽ!ƒ ƘƓƞĂ ÜăƧƤĎ ƗǌƞǇǆ Ɨǰƪ 40-31Ă ýƿƎ Ɨǰƪ 30ƧǆƵ!ƒ
.ýƗƗ ǇőƗǆƙ!ƒ ŎƽĂ ÜŎƵƒƥƕŰƒ ǁĂǀƪ!ƒĂ ÜƗő!ǔǀƙƪŰƒĂÜƘƒƧƒƧǀ!ƒ ỵǰƬ Ŏƽ ƗƗƧƓƬǆ!ƒ ýƓƞǆ

ÜŁǰùꞁ 50-41Ă Łnjɳ ǇǰǇ Łǰꞁ 40-31 ƧǰƶǃƒŁƑ5 ǇǰǇ (α≤0.05) ŁǒƑƓƮơƺ Ł!Ǖþ ƘƒƦ ƽĂƧ5 þĂɳĂ -

ƘƓùƑ5!ƒĂ Ƨλǂƌ5 51 ƧǰƶǃƒŁƑ5 ǇǰǇ ƽĂƧ5 þĂɳĂ ǇǰǇ ƓǰŁ.Łǰꞁ 50-41ƧǰƶǃƒŁƑ5 Ơ!ƓƮ! ƽĂƧ5!ƒ ƘƓƓɳĂ

Ŏù5 Ƨλǂƌù5 51 ŁùǒƧǰƶǃƒŁùƑ5!ƒ Ơ!ƓƮ! ƽĂƧ5!ƒ ƘƓƓɳĂ Łǰꞁ 50-41Ă ÜŁǰꞁ 40-31 Ă Üýƿƌ5 Łǰꞁ30

.Łǒ!ǖǀꞁǕƒ

ƽĂƧù5!ƒ ƘƓƓùɳ Ł ùǒơ Ü (α≤0.05) ŁǒƑƓƮơƺ Ł!Ǖþ ƘƒƦ ƽĂƧ5 þĂɳĂ ƧĂnjƱ ŁλơƓ!ƒ ƒĂƨƶ þpĂ

ÜŎƵƒþùǕƒ ǁĂùꞁ!ƒĂ ÜƘƒƧƒƧùǀ!ƒ yƓùƮ Ŏ5 ŁǂƧƓƮǰ!ƒĂ ÜŁǀλ!ƒ ýƓɳǰ Ŏ5 Ƨλǂƌ5 51 Ƨǰƶ!ƒ ŁƑ5 Ơ!ƓƮ!

Ɣùꞁ ƓùǂƒƧþƺ ƧλǂƉ ǅNj Ƨλǂƌ5 51 ŁǒƧǰƶ!ƒ ŁƑ5!ƒ ǇǰǇ ǇǒƱĂǰ!ƒ ǇƉ Ĭ!ƒ ýǂǂ Ǉǒǂǰ!ƒ Ŏ5Ă ÜŁǒ!ǖǀꞁǕƒĂ

.Ł5ǀƤǰ!ƒ ǊǕƓɳǰĂ Ǉǒǂǰ! ŁǒƶpƒĂ!ƒĂ Łǒƶ5!ƒ ŁꞁƧƓǰ!ƒ ĬƵ ǅnjƵǖƱƺĂ Łǰǂƒƌǰ!ƒ ǅnjƒƧƤ

ǇùǰƧλǂƌù5 51Ƨǰƶ!ƒ ŁƑ5 ǇǰǇ Ü(α≤0.05) ŁǒƑƓƮơƺ Ł!Ǖþ ƘƒƦ ƽĂƧ5 þĂɳĂ Ɣꞁ Łλơ!ƒ Ƨꞁ5 Ɠǂ

Ơ!ƓùƮ! ƽĂƧ5!ƒ ƘƓƓɳ Ŏ!ƒ ÜŁǰꞁ 50-41Ă Łǰꞁ 40-31Ă ýƿƌ5 Łǰꞁ 30 ŁǒƧǰƶ!ƒ ƘƓƑ5!ƒ ǇǰǇ ýǂĂ Łnjɳ

ŁùǒƧǰƶ!ƒ ŁùƑ5!ƒ ǉƦùNj ǇƉ Ĭù!ƒ ŁɳǒǀǰǉƦNj þĂɳĂ Ɣꞁ þĂƶǒ þpĂ Ü Łǒ!ǖǀꞁǕƒ Ŏ5 Ƨλǂƌ5 51 Ƨǰƶ!ƒ ŁƑ5

ŁùǒƧơ!ƒ ǇùǰƧùǒλǂ!ƒ ǅnjơǰùǰƒ ŁǒþƓþ ƧƑƱĂ ǇĂǀơǒ ǅnjǰǕ Łǒ!ǖǀꞁǕƒ ăĂꞁǰ! ƓǂƒƧþƺ ƧλǂƉ ŁǰþǀǰǃƒŁƑ5

ǇǒùǇ ƽĂƧù5 þĂɳĂ Ü(α≤0.05) ŁǒƑƓƮơƺ Ł!Ǖþ ƘƒƦ ƽĂƧ5 þĂɳĂ Ɣꞁ Łλơ!ƒ Ƨꞁ5 Ɠǂ .Łǒ!ǖǀꞁǕƒĂ

Ƨǒꞁ5ǀĂ ÜŁǒ!ǖǀꞁǕƒ Ŏ5 50-41 Ƨǰƶ!ƒ ŁƑ5 Ơ!ƓƮ! ƽĂƧ5!ƒ ƘƓƓɳĂ Ü50-41Ă Łǰꞁ 40-31 Ƨǰƶ!ƒ ŎǀƑ5

Ŏ5 Łǒ!ǖǀꞁǕƒĂ ŁǒƧơ!ƒ ǊơǰǰǀĬƵƉ ƧƑƱĂ Ĭ!ƒ ĬǀƧƒ Ɠǂ ǇǰꞁƓ ƧƱĂǰ!ƒ ǅþǀ Ɠǂ ǊǇƉ ƓưǒƉ Ĭ!ƒ ǁ!Ʀ

.ƘƒƧƒƧǀ!ƒ ƦƓƤƺ

ǁŀŽǫǢǁǁǁ ǰǫŽ .3

ƘǦǒǒùƬƙƪǆ!ƒ Ǒ5 ǈǑǂǆƙ!ƒ ƘǙǤηǆ ǏǁƵ (One- Way ANOVA) ǐ ƥǤơǕ ƒ ǈǑǤǁƙ!ƒ ǘǒǁơƙ ƨǒǁƱƙ ǅƙ

: ǁ !Ʀ ǈǑǁǒ (20) ǅƿƧ ǘǍƥη!ƒǍ ǕǂǆƥƤ!ƒ ǉƥǆ ƧǒƺƙǆǃƵǁƙ ǂǒǉƥƧǙƒ ǂǒǆǍǂơ!ƒ

(20) ǖǋǫǁǁ

ǉƒǐƻƪǂƨǅǁǁ Ǐƺ ǅǐǀǅǂǁǁ ǌǋǂƨǅǁ ǎǫƑƟǕƐ ǅǐƑǤǂǁǁ ǖǐǂƟǂǋ ǁǐƥƑǐǉǅǁǁ ǉƑƺƐƥƟǗƐǋ ǁǐǤƑƨƟǁǁ ǉƑƯƨǋǂǅǁǁ

(**528**=ǅ) ǁǅǫǢǁǁǁ ǰǫǅ ƥǐƩǂǅǁ ƑǘǤǂ ǁǐǅǋǀƟǁǁ

ǁǁǕǫǁǁ ǁǐǝƑƬƟǕƐ	ƺ ǁǅǐǓ	ƥƙǀƑƺ ǁǆƨ 16		ǀƐǋǆƨ 15-11		ǀƐǋǆƨ 10-6		ǖǓƑƺ ǀƐǋǆƨ 5		
		ƺ ƐƥƟǆǕƐ ǎƥƑǐǉǅǁǁ	ƯƨǋǂǅǁǁǁǏǤƑƨƟǁǁ	ƺ ƐƥƟǆǕƐ ǎƥƑǐǉǅǁǁ	ƯƨǋǂǅǁǁǁǏǤƑƨƟǁǁ	ƺ ƐƥƟǆǕƐ ǎƥƑǐǉǅǁǁ	ƯƨǋǂǅǁǁǁǏǤƑƨƟǁǁ	ƺ ƐƥƟǆǕƐ ǎƥƑǐǉǅǁǁ	ƯƨǋǂǅǁǁǁǏǤƑƨƟǁǁ	
.000	8.119	.82	3.47	.85	3.41	.78	3.03	.87	3.16	ǂǀǈ!ƒ
.003	4.599	.92	2.78	.99	2.69	.93	2.44	.93	2.44	Ǒ5 ǂǂƧǤƬǆ!ƒ ƘƒƧƒƧǀ!ƒ ǘǐƬ
.000	6.858	.85	3.03	.84	2.78	.80	2.59	.90	2.73	ǂǒ!ǖǀƙƪǗƒ
.003	4.754	1.00	2.42	1.03	2.28	.98	2.01	1.02	2.11	ǁ Ǎǁƪ!ƒ ǑƵƒƥǁǙƒ
.000	7.823		2.92		2.78		2.51		2.60	ǘǂǂ ǈǑǂǆƙ!ƒ

ƧǒƥùǀƘ Ǒù5 ($\alpha \leq 0.05$)ǂù!Ǘƥ!ƒ ǎǍƙƪǆ ƥǉƵ ǂǒƑǤƬơǫ ǂ!Ǘƥ Ƙƒ Ʀ ƨǍƧ5 ƥǍηǍ (20) ǘǍƥη!ƒ ǈǆ ǈǑǁƙ

ǂηǒǀǉ!ƒ ǉƦǋǍ ǗǘǂǂǈǑǂǆƙ!ƒ Ǒ5Ǎ ƘǙǤηǆ ǘǒǆη Ǒ5 ǂǆƥƤ!ƒ ǉƥǆ Ƨƛǖ ǎƨƺƙ ǈǑǂǆƙ!ƒ ǎǍƙƪǆ! ǈǑƛǍơǁǆ!ƒ

.ǋƙǙǤηǆ ǘǒǆη Ǒ5Ǎ ǘǂǂ ǈǑǂǆƙ!ƒ ǎǍƙƪǆ Ǒ5 ǂǒƯƧ5!ƒ Ư5Ƨ Ǐ!ƒ ƧǒƬƙ

ǂùǒƥƺǁ!ƒ ƘǤùǉƧǤǀǆ!ƒ ǅƒƥƤƙùƪƒ ǅƙ ǂǒǁǤƪơ!ƒ ƘǤƱƪǍƙǆ!ƒ ǈǑǁ ǤǒƑǤƬơǫ ǂ!ƒƥ!ƒ ǂǒηǍƨ!ƒ ƨǍƧ5!ƒ ǈǤǒǁ!Ǎ

.(21) ǘǍƥη!ƒ Ǒ5 ǈǑǁǆ ǍǋǤǆǂ (Scheffe) ǋǑ5Ƭ ǂǀǒƧƱǁ

(21) üNjqW

(528 =Dž) hʋƨǂƗƠDžǁƐ LjƗŰƑWDžNj DžǏlDžƗǁƐ njNjƗƨDž ĂǂϒhʋDžǫƠǁƐ ϒǫDž þkŬhǐƨʅhʂǐþƯƓhǐǫϒƓǁƐ lƑǆþƑʂDžǁƐ

hʋǆƨ 16 þk|Fʒ	15-11 lƐNjǆƨ	10-6 lƐNjǆƨ	lƐNjǆƨ 5 üʒFʒ	ƯøƨNjƗDžǁƐ ǏƓƑƨƟǁƐ		
				3.16	ýpƓƼ ƘƒĂǉʅ 5	ƗlƛƒƑ
			.14	3.03	ƘƒĂǉʅ 10-6	
		.38*	.25	3.41	ƘƒĂǉʅ 15-11	
	.06	.44*	.30*	3.47	ƧƛǂƓƼ Ɨǉʅ 16	
				2.44	ýpƓƼ ƘƒĂǉʅ 5	ƘƒƧƒƧ!ƒ ϒǉƬ ŎƼ ƗǂƧƓƬǆ!ƒ
			.00	2.44	ƘƒĂǉʅ 10-6	
		.24	.24	2.69	ƘƒĂǉʅ 15-11	
	.09	.34*	.33*	2.78	ƧƛǂƓƼ Ɨǉʅ 16	
				2.73	ýpƓƼ ƘƒĂǉʅ 5	Ɨő!ǚ|ƙʅŰƒ
			.14	2.59	ƘƒĂǉʅ 10-6	
		.19	.05	2.78	ƘƒĂǉʅ 15-11	
	.25	.44*	.29*	3.03	ƧƛǂƓƼ Ɨǉʅ 16	
				2.11	ýpƓƼ ƘƒĂǉʅ 5	ŎƵƒþhŬƒ ǁĂǐʅ!ƒ
			.10	2.01	ƘƒĂǉʅ 10-6	
		.27	.17	2.28	ƘƒĂǉʅ 15-11	
	.15	.42*	.32	2.42	ƧƛǂƓƼ Ɨǉʅ 16	
				2.60	ýpƓƼ ƘƒĂǉʅ 5	ýǂǂ LJőǂǆƙ!ƒ
			.09	2.51	ƘƒĂǉʅ 10-6	
		.27	.18	2.78	ƘƒĂǉʅ 15-11	
	.13	.40*	.31*	2.92	ƧƛǂƓƼ Ɨǉʅ 16	

* hʋǁǫ ǫǆϒ njNjƗƨDž ŰǫǁƐ hʋǁŰǫ ($\alpha \leq 0.05$).

:ŎƙŬƒ (21) ýĂþƞ!ƒ LJǆ LJőhʋő

- ĂƞþƼƧĂʂ ƘƒƦ þŬ!Ɨ ǫƠƬƓőƗ ($\alpha \leq 0.05$) LJőhʋ ƼƑƗ ƒ!ƤþǆƗ 10-6 ʅùǉĂƒƘ Ă15-11 ʅùǉĂƒƘÜ

ĂƞƓƘ ƒ!ƧĂʂ !ƬƓ!Ơ ƼƑƗ ƒ!ƤþǆƗ15-11Ü ǂǆƓ ƙʋőLJ ĂƞþĂƧʂ þƒ!Ɨ ǫƠƬƑƓő hʋőLJ ƼƑùƗ ƒ!ƤþǆùƗ 16

[illegible] 10-6 [illegible] 5 [illegible]

[illegible] 16 [illegible].

- [illegible] $(\alpha \leq 0.05)$ [illegible] 16 [illegible] 5 [illegible] 10-6 [illegible] 16 [illegible].

- [illegible] $(\alpha \leq 0.05)$ [illegible] 10-6 [illegible] 16 [illegible] 16 [illegible].

[illegible] $(\alpha \leq 0.05)$ [illegible] 16 [illegible].

.4 [illegible]

[illegible] (One-Way ANOVA) [illegible] (22) [illegible]:

(22) [illegible]

[illegible] (528=[illegible])

[illegible]	[illegible]	[illegible]		[illegible]		[illegible]		
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
.015	4.251	.73	3.30	.88	3.18	.83	3.40	[illegible]
.814	.206	.91	2.69	.99	2.61	.93	2.61	[illegible]
.430	.844	.84	2.92	.86	2.77	.87	2.84	[illegible]
.656	.422	.96	2.34	1.02	2.20	1.03	2.25	[illegible]
.404	.908		2.81		2.68		2.77	[illegible]

[illegible] ($\alpha \le 0.05$) [illegible] (22) [illegible]

[illegible] (Scheffe) [illegible] (23).

(23) [illegible]

[illegible]

[illegible]	[illegible]	[illegible]	[illegible]		
			3.40	[illegible]	[illegible]
		.23*	3.18	[illegible]	
	.12	.10	3.30	[illegible]	

*($\alpha \le 0.05$) [illegible]

[illegible] (23) [illegible] ($\alpha \le 0.05$) [illegible] ($\alpha \le 0.05$) [illegible]

5. [illegible]

[illegible] (One-Way ANOVA) [illegible]

[illegible] (24) [illegible]:

[illegible] (24)

[illegible]

(**528**=[illegible]) [illegible]

[illegible]	[illegible]	[illegible]		[illegible]		[illegible]		[illegible]		
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
.920	.165	.82	3.25	.97	3.32	.78	3.32	.88	3.30	[illegible]
.007	4.034	.96	2.48	.98	2.87	.87	2.53	1.02	2.69	[illegible]
.074	2.328	.89	2.80	.84	2.91	.85	2.72	.88	2.97	[illegible]
.113	1.997	1.05	2.12	1.00	2.38	.95	2.18	1.13	2.36	[illegible]
.084	2.231		2.66		2.87		2.68		2.83	[illegible]

[illegible] ($\alpha \leq 0.05$) [illegible] (24) [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] (Scheffe) [illegible] (25) [illegible].

(25) [illegible]

[illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
				2.69	[illegible]	[illegible]
			.16	2.53	[illegible]	
		.34*	.18	2.87	[illegible]	
	.39*	.05	.21	2.48	[illegible]	

.(α≤ 0.05) [illegible]*

[illegible] (α≤0.05) [illegible] (25) [illegible]

[illegible] (α≤0.05) [illegible]

[illegible]

(α≤ 0.05) [illegible]

[illegible]

ƧǘШǁǫ .1

ǵƶǶƙ ŧǒǉƥƧŬƒ ŧǒǆĂŧơ!ƒ ƘǤǒƽƬƙƪǆ!ƒ Ǒƽ ǇǙǒǁǆǤƶ!ƒ ǅƒƥƉ ƧǒĂƱƙ ƘŮǤƞǆ Ĭǁƶ (T-Test) ýǒǁơƙ ƾǒǶƱƙ Ǆƙ

: ǁ !Ʀ ǇǙǒǶǒ (26) ǄƿƧ ýĂƥƞ!ƒĂ ÜΣǉƞ!ƒ ƧǒƺƙǄ!

(26) üǸǫШ

ƌǫǫƈ ƥĭǸǙƯŧ ǌǸŧƨǄ Ăŧ Ƨ ǘШǁǫ ƥĭƩŧǄǁ ǯƴǤŧ "ǃ" ƥƑǤŧǅǫǫǸ ǶĭƥƑĭƴǄǁǫ ǃƑƺƥΘǘŰǫǸ ǶĭǤƑƨΘǁǫ ǃƑƯƨǸŧǄǁǫ

(**528**=Ǆ) ǶĭǄǸǀΘǁǫ ǃƑĭƨƪŧƨǄǁǫ Ĭƺ ǄĭŧǄƑƴǁǫ

ǶǁŰǫǁǫ ǶĭǝƑƬΘŰǫ	ǶǄĭƾ ǃ	ĂƙǄǫ		ƥǀƤ		
		Ƹ ǫƥΘǘŰǫ ăƥƑĭƴǄǁǫ	Ư ƨǸŧǄǁǫ ĬǤƑƨΘǁǫ	Ƹ ǫƥΘǘŰǫ ăƥƑĭƴǄǁǫ	Ư ƨǸŧǄǁǫ ĬǤƑƨΘǁǫ	
.918	-.103	.96	2.43	1.03	2.42	ǅƒƥŬƒ Ǆǒǒǀƙ
.699	.387	.91	2.08	1.00	2.11	ƨǒƽơƙ!ƒ
.525	.635	.97	2.34	1.07	2.40	ŧǶǤƥƧ!ƒ
.860	-.177	.98	2.39	1.03	2.37	ǸǒƞĂ!ĂǉŧƙĂ!ƒ ýƑǤƪĂ!ƒ ǄƒƥƤƙƪƍ
.855	.182		2.31		2.32	ýŧŧ ǇǙǒǁǆǤƶ!ƒ ǅƒƥƉ ƧǒĂƱƙ

Ǒƽ (α≤ 0.05) ŧ!Ŭƥ!ƒ ăĂƙƪǆ ƥǉƵ ŧǒƑǤƮơƍ ŧ!Ŭƥ ƘƒƦ ƾĂƧƽ ƥĂƞĂ ǄƥƵ (26) ýĂƥƞ!ƒ Ǉǆ ǇǙǒǶƙǒ

ǅƒƥƉ ƧǒĂùƱƙ ǑƽĂ ƘŮǤƞǆ!ƒ ýǒǆƞ Ǒƽ Σǉƞ!ƒ ƧǻŰ ăƨƶƘ ǇǙǒǁǆǤƶ!ƒ ǅƒƥƉ ƧǒĂƱƙ ăĂƙƪǆ! ǇǙǒǻĂơǶǆ!ƒ ƧǒƥǀƘ

ýǒǆƞ ǑƽĂ ýŧŧ ǇǙǒǁǆǤƶ!ƒ ǅƒƥƉ ƧǒĂƱƙ ăĂƙƪǆ Ǒƽ ŧǒưƧƽ!ƒ Ưƽ Ƨ Ĭ!ƒ ƧǒƬƙ ŧƞǒƙǉ!ƒ ǉƦǸĂ .ýŧŧ ǇǙǒǁǆǤƶ!ƒ

.ǸǁƙŬǤƞǆ

.2 [illegible]

[illegible] (One-Way ANOVA) [illegible]

[illegible] (27) [illegible] :

(27) [illegible]

[illegible]

[illegible] (528=[illegible])

[illegible]	[illegible]	51 [illegible]		41-50 [illegible]		31-40 [illegible]		30 [illegible]		
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
.004	4.472	1.00	2.86	1.04	2.54	.95	2.31	.99	2.37	[illegible]
.000	6.338	.85	2.65	.93	2.16	.94	1.98	.98	2.05	[illegible]
.002	4.851	.92	2.83	1.07	2.49	.99	2.26	1.00	2.30	[illegible]
.001	5.678	.98	2.93	1.02	2.46	.99	2.29	.98	2.28	[illegible]
.000	6.458	.85	2.82	.92	2.41	.88	2.21	.87	2.25	[illegible]

[illegible] (α≤0.05) [illegible] (27) [illegible]

[illegible]

[illegible]

[illegible]

.(28) [illegible] (Scheffee) [illegible]

(**28**) üŇǰǪ

ƀƐǭǗƐ ƃǏŇǰƯƗ ǉǗƑǛƊǎ ĂƗƳ ƃƊǅȳǁƐ ƃǨǓ ƫǏƧǽ ƫƨǏƃƯǤ ƫǏǭȳǤǁƐ ǉƑǎƃƑƨƊǁƐ

ƃǨǉƑǯ **51**	**50-41** ƫǍƧ	**40-31** ƫǍƧ	ƫǍƧ **30** üƾǅǯ	ƯƧŇƗƊǁƐ ǏǤƑƧƟǁƐ		
				2.37	ýƿƋ Ɨǈǽ 30	ƀƐǭǗƐ !ǏǏƨƗ
			.07	2.31	Ɨǈǽ 40-31	
		.23	.16	2.54	Ɨǈǽ 50-41	
	.32	.55*	.48	2.86	ƧǇƗǤ 51	
				2.05	ýƿƋ Ɨǈǽ 30	ƦǏƧƟǁƐ
			.07	1.98	Ɨǈǽ 40-31	
		.17	.11	2.16	Ɨǈǽ 50-41	
	.49*	.67*	.60*	2.65	ƧǇƗǤ 51	
				2.30	ýƿƋ Ɨǈǽ 30	ƫǤƑƾƃǁƐ
			.04	2.26	Ɨǈǽ 40-31	
		.24	.19	2.49	Ɨǈǽ 50-41	
	.34	.58*	.53*	2.83	ƧǇƗǤ 51	
				2.28	ýƿƋ Ɨǈǽ 30	üǝƑƧŇǁƐ !ƐǭǮƗƧƋ
			.01	2.29	Ɨǈǽ 40-31	ǈǏǰŇǁŇǍǉƗǁƐ
		.17	.18	2.46	Ɨǈǽ 50-41	
	.47	.64*	.65*	2.93	ƧǇƗǤ 51	
				2.25	ýƿƋ Ɨǈǽ 30	ƀƐǭǤ ƃǏŇǰƯƗ
			.04	2.21	Ɨǈǽ 40-31	üǉǉ ǅǏƗƊǅȳǁƐ
		.20	.16	2.41	Ɨǈǽ 50-41	
	.41	.61*	.57*	2.82	ƧǇƗǤ 51	

.(α≤ 0.05) Ɨ!ǕƃǇ ăĂǨǽǍ ƃǈƵ Ɨ!ǇƃǇ*

:ǑǨǓǇ (28) ýĂƃƞǇ ǈǍ ǈǑǫǨǑ

- ĂǈƞĂ ƃĂƞƧ ƨĂƧƽ ƘǇƦ ƃǕǇ Ɨ!ƊǅƫǤƘƲƓ ǆǈƵǍ ăĂǨǽǍ (α≤0.05) ǈǑǫ ǑǨƽǇ ƧǍǎƵǇ 40-31 ƗǈǽƗ 51 ǓƧǇƗǤǗ

.ǇƃǕǇ ǍǑǑǉǨ ýǤƞǍ Ǒƽ ƧǇƗǤ 51ƧǍǎƵǇ ƗǇƽ ƠǈǤƮ! ƨĂƧƽǇ ƘǇƞĂ

- ĂǈƞĂ ƃĂƞƧ ƨĂƧƽ ƘǇƦ ƃǕǇ Ɨ!ƊǅƫǤƘƲƓ ǆǈƵǍ ăĂǨǽǍ (α≤0.05) ǈǑǫ ǑǨƽǇ ƧǍǎƵǇ 51 ƧǇƗǤǗ ǈǍ ƗǒǈƞƟ ƗĂǒý

ƧǍǎƵǇ ƗǇƽ ƠǈǤƮ! ƨĂƧƽǇ ƘǇƞĂ üăƧƤ ƗǈƞƟ ǈǍ 50-41 ü40-31Ă üýƿƋ ƗǈǽƗ 30 ƗǑƧǍǎƵǇ ƘǤƽǇ ǈǍ

.ƧǑǽǑǨǇ ýǤƞǍ Ǒƽ ƧǇƗǤ 51

- ĂǈƞĂ ƃĂƞƧ ƨĂƧƽ ƘǇƦ ƃǕǇ Ɨ!ƊǅƫǤƘƲƓ ǆǈƵǍ ăĂǨǽǍ (α≤0.05) ǈǑǫ ǑǨƽǇ 51ƧǍǎƵǇ ƧǇƗǤǗ ǈǍ ƗǈƞƟ ƗĂǒý

ƧǇƗǤ 51ƧǍǎƵǇ ƗǇƽ ƠǈǤƮ! ƨĂƧƽǇ ƘǇƞĂ üăƧƤ ƗǈƞƟ ǈǍ 40-31Ă üýƿƋ ƗǈǽƗ 30 ƗǑƧǍǎƵǇ ƘǤƽǇ ǈǍ

.ýƗƗ ǈǑǍǤǍǎǇ ǇƃƤ ƧǑĂǑǨ ǑƽĂ üǉǑƞĂ!ĂǈƗǨ!Ǉ ýǤƞǽĂ!Ǉ ǍǇƃƤǨǽƲĂ üƗƫǤƧ!Ǉ ǑǇǤƞǍ Ǒƽ

[illegible] 51 [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

3. [illegible]

[illegible] (One-WayANOVA) [illegible]

[illegible] (29) [illegible]:

(29) [illegible]

[illegible]

(**528**=[illegible]) [illegible]

[illegible]	[illegible]	16 [illegible]		15-11 [illegible]		10-6 [illegible]		5 [illegible]		
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
.019	3.329	.99	2.56	1.00	2.46	.96	2.19	1.00	2.39	[illegible]
.189	1.599	.90	2.20	1.03	2.11	.97	1.99	.94	2.01	[illegible]
.025	3.149	.97	2.50	1.08	2.45	1.03	2.16	.99	2.28	[illegible]
.034	2.921	.98	2.53	1.10	2.41	.95	2.27	.99	2.21	[illegible]
.027	3.083		2.45		2.35		2.15		2.22	[illegible]

[illegible] (α≤ 0.05) [illegible] (29) [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

.(30) [illegible] (Scheffe) [illegible]

(30) [illegible]

[illegible]

(**528**=[illegible]) [illegible]

[illegible] **16** [illegible]	**15-11** [illegible]	**10-6** [illegible]	[illegible] **5** [illegible]	[illegible]		
				2.39	[illegible] 5	[illegible]
			.20	2.19	[illegible] 10-6	
		.27	.06	2.46	[illegible] 15-11	
	.11	.37*	.17	2.56	[illegible] 16	
				2.28	[illegible] 5	[illegible]
			.12	2.16	[illegible] 10-6	
		.29	.17	2.45	[illegible] 15-11	
	.06	.34*	.22	2.50	[illegible] 16	
				2.21	[illegible] 5	[illegible]
			.06	2.27	[illegible] 10-6	
		.15	.20	2.41	[illegible] 15-11	
	.11	.26*	.32	2.53	[illegible] 16	
				2.22	[illegible] 5	[illegible]
			.07	2.15	[illegible] 10-6	
		.20	.13	2.35	[illegible] 15-11	
	.09	.30*	.23	2.45	[illegible] 16	

.($\alpha \leq 0.05$) [illegible] *

[illegible] ($\alpha \leq 0.05$) [illegible] (30) [illegible] 10-6 [illegible] 16 [illegible] 16 [illegible] (16 [illegible]) [illegible].

.4 [illegible]

[illegible] (One-Way ANOVA) [illegible]

: [illegible] (31) [illegible]

(31) [illegible]

[illegible]

(**528** =[illegible]) [illegible]

[illegible]	[illegible]	[illegible]		[illegible]		[illegible]		
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
.758	.277	.96	2.49	1.03	2.39	.98	2.44	[illegible]
.140	1.974	.93	2.32	1.01	2.10	.91	2.05	[illegible]
.324	1.130	1.08	2.56	1.07	2.33	.96	2.36	[illegible]
.318	1.149	1.04	2.52	1.04	2.31	.97	2.41	[illegible]
.375	.984		2.47		2.28		2.31	[illegible]

[illegible] (α≤0.05) [illegible] (31) [illegible]

[illegible]

[illegible]

[illegible]

hưđŇǊĎŽǁƐ **.5**

Ŏù5 LJŏǁďžĜùƨ!ƒ CƒþÐ ƧŏĂƱƙ ƘŬĜɳďž Ĭǁƶ (One-Way ANOVA) ĭþĜơŪƒ LJŏĜhƙ!ƒ ýŏǁơƙ ʂŏhƱƙ Ďžƙ

: ǁ !Ʀ LJŏhŏ (32) ĎƿƧ ýĂþɳ!ƒĂ ÜŧLjnjďž!ƒ ƧŏƺƙďžǃŰƶhƙ ŧŏLjþƧŬƒ ŧŏďžĂǂơ!ƒ ƘĜŏƼTƙʅďž!ƒ

(32) üŇǫǁǁ

Ĭƺ ĎžĭŧĎŽƑyǁƐ ƅƐǭƈ þĭŇǇƱŧ njŇŧƨĎžǁ ăǫƑƟŰƐ ĎžĭƑĜŧǁƐ üĭŧƟŧŇ hưĭþƑĭyĎžǁƐ ǀƑƺƐþƟďŰƐŇ hưĭĜƑƨƟǁƐ ǀƑƱƨŇŧĎžǁƐ

(**528**=Ďž) hưđŇǊĎŽǁƐ þĭƩŧĎžǁ ƑyĜŧ hưĭĎŽŇǀƟǁƐ ǀƑĭžʅŧƨĎžǁƐ

hưǁŰǫǁƐ hưĭəƑƬƟŰƐ	ƹ hưĎžĭƨ	Ĭďžƺ		ăþƐǭď		ƈþĎžĎž		ƒĭĜƱ		
		ƹƐþƟďŰƐ ăþƑĭyĎžǁƐ	ƱƨŇŧĎžǁƐ ĬĜƑƨƟǁƐ	ƹƐþƟďŰƐ ăþƑĭyĎžǁƐ	ƱƨŇŧĎžǁƐ ĬĜƑƨƟǁƐ	ƹƐþƟďŰƐ ăþƑĭyĎžǁƐ	ƱƨŇŧĎžǁƐ ĬĜƑƨƟǁƐ	ƹƐþƟďŰƐ ăþƑĭyĎžǁƐ	ƱƨŇŧĎžǁƐ ĬĜƑƨƟǁƐ	
.027	3.084	1.01	2.26	1.01	2.59	.94	2.37	1.05	2.59	ƅƐǭŰƐ !ĭĭƨŧ
.020	3.310	.95	1.98	.99	2.18	.88	2.01	1.04	2.33	ƦĭƧƟŧǁƐ
.000	6.534	.97	2.20	1.10	2.58	.92	2.23	1.10	2.65	hưĜƑƼþǁƐ
.253	1.365	.99	2.34	1.08	2.48	.91	2.30	1.15	2.50	!ƐǭǷŧƨƌ üəƑƨŇǁƐ LjĭǁǁŇǁŇďǀŧǁƐ
.011	3.778		2.20		2.45		2.23		2.51	ƅƐǭƈ þĭŇǇƱŧ ĎžĭŧĎŽƑyǁƐ üǀǀ

Ƨŏþù ǀƙ Ŏù5 ($\alpha \leq 0.05$) ŧ!Ŭþ!ƒ ăĂƙʅďž þLjƶ ŧŏƑĜƬơƺ ŧ!Ŭþ ƘƒƦ ʂĂƧ5 þĂɳĂ (32) ýĂþɳ!ƒ LJďž LJŏhƙŏ

LJŏǁďžĜƶ!ƒ CƒþÐ ƧŏĂƱƙ Ŏ5Ă ƘŬĜɳďž!ƒ yŏďžɳ Ŏ5 ŧLjnjďž!ƒ ƧλŪ ăƨƶƙ LJŏǁďžĜƶ!ƒ CƒþÐ ƧŏĂƱƙ ăĂƙʅďž! LJŏλĂơhďž!ƒ

ƧŏĂùƱƙ ăĂƙʅďž Ŏ5 ŧŏưƧ5!ƒ ýĂhƿ Ĭ!ƒ ƧŏTƙ ŧɳŏƙLj!ƒ LjƦŇĂ .ŇŏɳĂ!ĂLjǂƙ!ƒ ýƑĜʅĂ!ƒ ĎžƒþƤƙʅƒ ýĜɳďž CĜLjλƙʅĜh

.ŇŏɳĂ!ĂLjǂƙ!ƒ ýƑĜʅĂ!ƒ ĎžƒþƤƙʅƒ ýĜɳďž Ŏ5 Ĝnjư5ƧĂ .Ňƙ!Ĝɳďž yŏďžɳ Ŏ5Ă ýǂǂ LJŏǁďžĜƶ!ƒ CƒþÐ

ŧùŏþƶh!ƒ ƘĜùLjƧĜǀďž!ƒ ĎžƒþƤƙʅƒ Ďžƙ ŧŏhĜʅơ!ƒ ƘĜƱʅĂƙďž!ƒ LJŏh ĜŏƑĜƬơƺ ŧ!ƒþ!ƒ ŧŏɳĂƨ!ƒ ʂĂƧ5!ƒ LJĜŏh!Ă

.(33) ýĂþɳ!ƒ Ŏ5 LJŏhďž ĂŇ Ĝďžǂ (Scheffe) ŇŏƼT ŧǀŏƧƱh

(33) üǋƍǁ

ǀƑĭƸƪƗƨǅǁƐ Ĭƺ ǅĭƗǅǄƴǁƐ ƋƐƍƈ þĭǋƯƗ ǀƑĭǋƗƨǅ ĂƗƳ ƕǆǋǅǁƐ þǨŬ ƕĭƸƪ ƕƫĭþƯƓ ƕĭƍƴƓǁƐ ǀƑǆþƑƫǅǁƐ

(**528**=ǅ) ƕĭǅǋǀƟǁƐ

Ĭǘɀ	ăþƐƍƌ	f þǅǅ	ƒĭƓƯ	ƯƨǋǅǁƐ ĬƓƑƨƟǁƐ		
				2.59	ƔǒǁƆ	ƋƐƍǗƐ !ĭĭƫƗ
			.22	2.37	ƯƧǅǅ	
		.22	.00	2.59	ĭƧƒþ	
	.33	.10	.32*	2.26	Ŏǉƽ	
				2.33	ƔǒǁƆ	ƦĭƸƟƗǁƐ
			.31	2.01	ƯƧǅǅ	
		.17	.15	2.18	ĭƧƒþ	
	.20	.03	.35*	1.98	Ŏǉƽ	
				2.65	ƔǒǁƆ	ƕƓƑƽþǁƐ
			.42*	2.23	ƯƧǅǅ	
		.35	.07	2.58	ĭƧƒþ	
	.38	.03	.45*	2.20	Ŏǉƽ	
				2.51	ƔǒǁƆ	ƋƐƍƈ þĭǋƯƗ
			.28	2.23	ƯƧǅǅ	üǀǀ ǅĭƗǅǄƴǁƐ
		.23	.06	2.45	ĭƧƒþ	
	.26	.03	.31*	2.20	Ŏǉƽ	

.($\alpha \leq 0.05$) Ɨ!Ǚþ!ƒ ăĂǨƪǅ þǉƷ Ɨ!ƒþ *

:ŎǨǛƒ (33) ýĂþƞ!ƒ ǈǅ ǈǒǁǨǒ

ýùƗ Ŏƽ ƔǒǁƆ Ơ!ƓƮ! ƭĂƧƽ!ƒ ƘƇƓƞĂ ÜŎǉƽĂ ƔǒǁƆ ǈǒǁ ($\alpha \leq 0.05$)ƗǒƑƓƮơƒ Ɨ!Ǚþ ƘƒƦ ƭĂƧƽ þĂƞĂ-

.ýƗƗ ǈǒǁǅƓƺ!ƒ ƇƒþƉ ƧǒĂƆǨĂ ÜƗƕƓƥƧ!ƒĂ ÜƨǒƽơǨ!ƒĂ ÜƇƒþǙƒ ǅǒǒǀǨ ǈǅ

Ɨùǌƞ ǈùǅ ŎǉƽĂ ƯƧǅǅ ǈǅ ýƗĂ Ɨǌƞ ǈǅ ƔǒǁƆ ǈǒǁ ($\alpha \leq 0.05$) ƗǒƑƓƮơƒ Ɨ!Ǚþ ƘƒƦ ƭĂƧƽ þĂƞĂ -

.ƗƕƓƥ!ƒ ýƓƞǅ Ŏƽ ƔǒǁƆ Ơ!ƓƮ! ƭĂƧƽ!ƒ ƘƇƓƞĂ ÜăƧƤƉ

Ɨùǒǁǅƺ! ƓùƗƒƧƒ ƧƛƗƉ ÜƗǉǌǅ!ƒ Ɨǒơ ǈǅ ăĂǨƪǅ ĬǁƷǙƒ ǅǋĂ ÜƇƓƆǙƒ ǈĂƗ! Ɨƞǒǉ!ƒ ǉƦǋ ăƨƶǨ ƓǅƕƧ

.ǈǒǁǅƓƺ!ƒ ƇƒþƉ ƧǒĂƆǨ

DžǏø|DžǂnjǋǂƨDž (α≤ 0.05) ƕǁǁŰǪǁǁ njǋǂƨDž ǪǁǁY ƕǏƋƑƬƟǛ ƕǁǁŰǪ ǋǈǋ !ƑǇ ƥǩƈ ƿƑǁǇ :ƕƨDžƑǪǁǁ ƕǏƮƥƻǁǁ

.DžǏǂDžƑǗǁǁ ƅƐǪƈ ƥǏǋǛǂ njǋǂƨDž ĂǂY üƑDžǓǁǁ !ǏǂǮ Ǐƺ ƕǏǁǁǪƥŰǁǁ ƕǏDžǋ|ƟǁǁƖƑǏƷǓǂƨDžǁǁ Ǐƺ DžǏǂDžƑǗǁǁ

ǇƥǦùƶƕǁǁ ǇǑùǂǁǁǨ!ƒ ǂùǓƧǦǁǁ ăĂǨǓǁǁ ƧǺD ǂǮƶǁǁ! ƧƒƥơǇŰƒ ǘǑǁǁơǨ DžƒƥƤǨǓƒ DžǨ ǂǑƯƧǮ!ƒ ǇǋǋƧǦƕǨƤŰ

ǘĂƥƞ!ƒ ǑǮ ǇǑƕǁǁ ĂǋǁǁǂǘǦǁǁƬ!ƒ DžǑǁǁƿ ǑǮ ǂǑǁǁƥƧŰƒ ǂǑǁǁĂǂơ!ƒ ƘǦǑǮƬǨǓǁǁ!ƒ ǑǮ ǇǑǁǁǁǁǦƶ!ƒ ǇƒƥD ǏǁǁƵ ǂǮǁǁƤǁǁ!ƒ

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(34) üǋǪǁǁ

Ǐƺ üǁǁ DžǏǂDžƑǗǁǁ ƅƐǪƈ ƥǏǋǛǂ ĂǂY ƕƨǂƑǪDžǁǁ ǇǪƑǗǦǅǦ DžǏ|DžǂǁǁƕƨƥƑDžǁǁ njǋǂƨDžǁǁ ƥƐǪƟǁǁŰǁǁ üǏǂƟǂ

(**528**=Dž) üƑDžǓǁǁ !ǏǂǮ Ǐƺ ƕǏǁǁǪƥŰǁǁ ƕǏDžǋ|Ɵǁǁ ƖƑǏƷǓǂƨDžǁǁ

Ƹ ƕǁǁŰǪ ƕǏƋƑƬƟǛƸ	Ƹ ƕDžǏǭ	DžǏƑǦǂǁǁ ƥƨƸDžǁǁ	ƲƑǦǂƥǛƸ	Ɩ ƕǁǁŰǪ ƕǏƋƑƬƟǛƸ	Ɩ ƕDžǏǭ	. Beta	üƨǂƨDžǁǁ ƥǏǪǂDžǁǁ
.000	344.546	.725	.852	.265	1.115	.033	ǂǁǺ!ƒ
				.000	6.606	.256	ǑǮ ǂǂƧǦƬǁǁ!ƒ ƘƒƧƒƧǁ!ƒ ǘǇƮ
				.000	3.805	.126	ǂǑ!ǖǁǨǓŰƒ
				.000	14.389	.529	ǑƵƒƥƕŰƒ ǁǁĂǁǁǓ!ƒ

DžǏǂDžƑǗǁǁ ƅƐǪƈ ƥǏǋǛǂ :ƲǦƑǂǁǁ ƥǏǪǂDžǁǁ

ƘƧùǓǮ ǂǮǁǁƤǁǁ!ƒ ǇƥǦƶƕǁǁ ǇǑǂǁǁǨ!ƒ ǂǓƧǦǁǁ ǇD ǏD (.725) ƸǁǁƕƧǓǮǁǁ!ƒ ǇǑǦƕǁǁ!ƒ ǇD ǇǖƵD ǘĂƥƞ!ƒ ǇǁǁǇǑƕǨǑ

ǇùǁǁǘǦùƞǁǁǂǂǁǺǁǁ!ǦǑƑǦƮơƒ ǘƒƥ ƧǺƒ ƥĂƞĂ DžƥƵ ǇǑƕǨ Ǧǁǁǂ ŰǇǑǁǁǁǁǦƶ!ƒ ǇƒƥD ƧǑĂƱǨ Ǉǁǁǁǁǁǁǁǁǁƥǁǁǁǁ %72.5 ǋǨǁǁǑƿ Ǧǁǁ

ƘùƺǁǁǂǑƑǦùƮơƣǂù!ŰƥƕŰ(1.115) "Ƙ" ǂùǁǁǑƿƘƺǁǁ ǂǑơǇǑǁǁǁǁǦƶ!ƒ ǇƒƥD ƧǑĂƱǨǏǁǁƵ ǇǑǂǁǁǨ!ƒ ƘŰǦƞǁǁ

ǏùǁǁƵ ǇǑùǂǁǁǨǁǁ! ǘǦùƞǁǁǂ ƧƒƧǁ!ƒ ǘǇƮ ǑǮ ǂǂƧǦƬǁǁǁǁ! ǦǑƑǦƮơƒ ǘƒƥ ǑƕǦƞǑƣ ƧǺƒ ƥĂƞĂ ǇǑƕǨ Ǧǁǁǂ Ű(.256)

ƥĂùƞĂ ǇǑùƕǨ Ǧǁǁǂ Ű(.000) ƘƺǁǁǂǑƑǦƮơƣ ǂ!ŰƥƕŰ(6.606) "Ƙ" ǂǁǁǑƿƘƺǁǁ ǂǑơǇǑǁǁǁǁǦƶ!ƒ ǇƒƥD ƧǑĂƱǨ

"Ƙ" ǂùǁǁǑƿƘùƺǁǁ ǂǑơǇǑǁǁǁǁǦƶ!ƒ ǇƒƥD ƧǑĂƱǨǏǁǁƵ ǇǑǂǁǁǨǁǁ! ǘǦƞǁǁǂ ǂǑ!ǖǁǨǓǖ! ǦǑƑǦƮơƒ ǘƒƥ ǑƕǦƞǑƣ ƧǺƒ

ǑƵƒƥùƕŰƒ ǁǁĂǁǁùǓǁǁ! ǦǑƑǦƮơƒ ǘƒƥ ǑƕǦƞǑƣ ƧǺƒ ƥĂƞĂ ǇǑƕǨ Ǧǁǁǂ Ű(.000) ƘƺǁǁǂǑƑǦƮơƣ ǂ!ŰƥƕŰ(3.805)

ǇǋùǋĂ .(.000) ƘùƺǁǁǂǑƑǦùƮơƣ ǂ!ŰƥƕŰ(14.389) "Ƙ" ǂǁǁǑƿƘƺǁǁ ǂǑơǇǑǁǁǁǁǦƶ!ƒ ǇƒƥD ƧǑĂƱǨǏǁǁƵ

. ǂǁǺ!ƒ ǘǦƞǁǁ ǦǦǇǺǨǓǁǁ ŰƘŰǦƞǁǁ!ƒ ǘǑǁǁƞ ǑǮ ǂǓǁǁǦƤ!ƒ ǂǑƯƧǮ!ƒ ǘĂƕƿ Ǐ!ƒ ƧǑƬǨ ǂƞǑǨǇ!ƒ

ǑùǮ ǇǑǁǁǁǁǦùƶ!ƒ ǇƒƥD ƧǑĂùƱǨ ƘŰǦùƞǁǁ ǇǁǁùǁǁǘǦùƞǁǁ ǘǂ ǏǁǁƵ ǇǑǂǁǁǨ!ƒ ƘŰǦƞǁǁ ǇǁǁǁǁǘǦƞǁǁ ǘǂ ƧǺD ǦǁǁD

:Ǒ!ǦǨ!ƒ ĂơǇ!ƒ ǏǁǁƵ ƘǇǦǂǮ ǘǦǁǁƬ!ƒ DžǑǁǁƿ ǑǮ ǂǑǁǁƥƧŰƒ ǂǑǁǁĂǂơ!ƒ ƘǦǑǮƬǨǓǁǁ!ƒ

[illegible]

(35) [illegible]

[illegible]

(**528**=[illegible]) [illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	. Beta	[illegible]
.000	239.221	.647	.804	.596	.531	.018	[illegible]
				.000	6.602	.290	[illegible]
				.000	4.209	.158	[illegible]
				.000	10.350	.431	[illegible]

[illegible]

[illegible] (.647) [illegible] %64.7 [illegible] (.596) [illegible] (.531) "K" [illegible] (.000) [illegible] (6.602) "K" [illegible] (4.209) "K" [illegible] (.000) [illegible] (10.350) "K" [illegible] .(.000) [illegible] ..

[illegible]

(36) [illegible]

[illegible] (528=[illegible])

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	. Beta	[illegible]
.000	208.948	.616	.785	.964	-.045	-.002	[illegible]
				.000	3.966	.182	[illegible]
				.016	2.426	.095	[illegible]
				.000	13.144	.571	[illegible]

[illegible]

[illegible] (.616) [illegible] %61.6 [illegible] (.964) [illegible] (-.045)"[illegible]" [illegible] (.000) [illegible] (3.966) "[illegible]" [illegible] (2.426) "[illegible]" [illegible] (.616) [illegible] .(.000) [illegible] (13.144) "[illegible]" [illegible] ..

[illegible]

(37) [illegible]

[illegible] (528=[illegible])

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	. Beta	[illegible]
.000	198.538	.603	.777	.157	1.416	.051	[illegible]
				.000	4.321	.201	[illegible]
				.001	3.206	.127	[illegible]
				.000	11.059	.488	[illegible]

[illegible]

[illegible] (.603) [illegible] %60.3 [illegible] (.157) [illegible] (1.416) "[illegible]" [illegible] (.000) [illegible] (4.321) "[illegible]" [illegible] (3.206) "[illegible]" [illegible] (.001) [illegible] (11.059) "[illegible]" [illegible] (.000) [illegible] .. [illegible]

[illegible]

(38) [illegible]

[illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	**. Beta**	[illegible]
.000	139.006	.516	.718	.170	1.376	.055	[illegible]
				.000	4.763	.245	[illegible]
				.083	1.735	.076	[illegible]
				.000	8.719	.425	[illegible]

[illegible]

[illegible] (.516) [illegible] %51.6 [illegible] (.170) [illegible] (1.376) "K" [illegible] (.000) [illegible] (4.763) "K" [illegible] (.083) [illegible] (1.735) "K" [illegible] (8.719) "K" [illegible] .(.000) [illegible]

[illegible]

[illegible]

(([illegible]))

[illegible] (230) [illegible]

[illegible] (298) [illegible] (%43) [illegible]

: [illegible] (33) [illegible] (%55)

(**39**) [illegible]

[illegible]

(**528**=[illegible]) [illegible]

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]			
[illegible]			
%10	30	[illegible]	1
%9	28	[illegible]	2
%7	20	[illegible]	3
%3	8	[illegible]	4
[illegible]			
%3	15	[illegible]	5
%5	10	[illegible]	6
%3	5	[illegible]	7
%1	2	[illegible]	8
[illegible]			
%2	6	[illegible]	9
%.3	1	[illegible]	10
[illegible]			
%9	28	[illegible]	11
%3	9	[illegible]	12
%3	5	[illegible]	13
%1	2	[illegible]	14
[illegible]			
%14	40	[illegible]	15
%13	38	[illegible]	16
%8	25	[illegible]	17
%8	23	[illegible]	18

%100	295	

[illegible] (α≤0.05) [illegible]

[illegible]

[illegible] (α≤0.05) [illegible]

[illegible]

[illegible] (α≤0.05) [illegible]

[illegible]

[illegible] (α≤0.05) [illegible] %72.5 [illegible]

[illegible] (α≤0.05) [illegible] (α≤0.05) [illegible] (α≤0.05) [illegible] (α≤0.05) [illegible]

(2003)

(2004)

(2009)

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(1998) .300- 298 (4)3

(2002)

(2009) .7-24 (1)36 3000

(2008)

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(2009) .(1987)

(1991)

[illegible] (1999) [illegible].

[illegible] (1989) [illegible] ..... [illegible] 144 [illegible].

[illegible] (2008) [illegible].

[illegible] (1996) [illegible].

[illegible] (2000) [illegible].

[illegible] (2006) [illegible].

[illegible] (1987) [illegible] 27 (56): 161-190.

[illegible] (1994) [illegible] (3) [illegible].

[illegible] :

[illegible] (2009) [illegible] :
[illegible].
[illegible] (2008) [illegible]
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[illegible] (2008) [illegible]
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[illegible] (2011-2010) [illegible]
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[illegible] (2011) [illegible]
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[illegible] (2011) [illegible]

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[illegible] (2003) [illegible]

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ǂǃƓ 50-41 ☐ ǂǃƓ 40-31 ☐ ýƿǖ ǂǃƓ 30 ☐

ƨǅǂǖ ǂǃƓ 61 ☐ ǂǃƓ 60- 51 ☐

:ǂǎƥƤ!ƒ ǀƥǎ

ǨƒĂǃƓ 15 -11 ☐ ǨƒĂǃƓ 10 -6 ☐ ýƿǖ ǨƒĂǃƓ 5 ☐

ƨǅǂǖ ǂǃƓ 16 ☐

:Ǒǎƶƹ!ƒ ýǆǍǎ!ƒ

ǀƒƨĂǂƥ ☐ ƨǑǂƓƞǍǎ ☐ Ʃ ĂǑƨĂ!ǃǂƅ ☐ ǍĂƶƅƥ ☐

ăƨƤƒ ☐

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……………………………………………………:ǃǌƅ ýǎƸǃ Ǒǩ!ƒ Ǐ ƾƬǩƓǎ!ƒ

[illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]						
					[illegible]	1
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(**2**) ΊϘǂǍ

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(**3**) 5ΘŧĐĭ

ŧλơĜħ!ƒ ŧđňŋjđ ýŏŋjʅķ! ýĜđŤ!ƒ Ďŏŏŀƥ Ŏ5 ŧŏđĂŧơ!ƒ ƘĜŏ5Tķʅđ!ƒ Ĭ!ƒ ‖Ăđƨŏ!ƒ ŧƶđĜŋ ǈJđ ǋŋĂđ Ɣ Ĝķŧ



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الموافق : ٢٠١٣/٣/٢٨

إلى من يهمه الأمر

تحية طيبة وبعد،،،،

يرجى العلم بان الطالبة مجد تيسير حسين سلامة تقوم بإجراء دراسة كمتطلب للحصول على درجة الماجستير تخصص إدارة عامة في جامعة اليرموك بعنوان :

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واقبلوا فائق الاحترام والتقدير،،،

مشرف الطالب

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(4)ʂơǁǆ

Ǒǆǁz!ƒ ƚơǃ!ƒ ƘǴǒpǔƤ Ƚǉƞ! ƩǒƑƧ Ǐ!ƒ ƧǒƬǃ!ƒ ǏƨƬƙƪǆ ƧǒƥǆǇǆ NƞǍǆ ƔǴƙǂ

وزارة الصحة

الرقم
التاريخ
الموافق

مدير مستشفى ....

تحية طيبة وبعد ،،،

أرفق طياً صورة عن كتاب مدير مستشفى البشير / رئيس لجنة أخلاقيات البحث العلمي رقم م ب أ / لجنة أخلاقيات /٦٧٢١ تاريخ ٢٠١٣/٢/٢١ بخصوص السماح لطالبة الماجستير في الادارة العامة **مجد تيسير حسين سلامه** إجراء بحث بعنوان :-

(التمكين واثره على اداء العاملين في المستشفيات الحكومية في اقليم الشمال)

وذلك عن طريق توزيع الاستبيان المرفق صورة عنه على الموظفين العاملين في مستشفيات الشمال .

أرجو التكرم بالإيعاز لمن يلزم تسهيل مهمة الباحثة أعلاه .

واقبلوا احترامي ،،،

مدير تطوير الموارد البشرية

الدكتورة فدوى الشوابكة

مساعد مدير
تطوير الموارد البشرية
الدكتور أمين العابدة

المملكة الأردنية الهاشمية
هاتف ٥٢٠٠٢٣٠ ٦ ٩٦٢+ فاكس ٥٦٨٨٣٧٣ ٦ ٩٦٢+ ص.ب ٨٦ عمان ١١١١٨ الأردن، الموقع الإلكتروني www.moh.gov.jo

(5)ﻣﻠﺤﻖ

ɫ ơħ!ƒ CƒƧɳ ǏƖƸ ɫǀ5ƒĂǆ!Ǘ ɫŏƧTħ!ƒ ƥƧƒĂǆ!ƒ ƧŏĂƱǩ Ƨŏƥǆ ǇǆNɳĂǆ ƔǗǩɫ

وزارة الصحة

الرقم م ب ١ /لجنة اخلاقيات / ٦٧٨١
التاريخ
الموافق ٢١/٤/٢٠١٣

مدير تطوير الموارد البشريه

تحيه طيبه وبعد ،،،

اشاره لكتابكم رقم تطوير /تخطيط / ٢٩٩٥ تاريخ ٢٠١٣/٤/١١ بخصوص البحث المقدم من طالبة الماجستير/مجد تيسير حسين سلامه .

بعنوان:-
" التمكين واثره على تطوير اداء العاملين في المستشفيات الحكوميه في اقليم الشمال "

يرجى التكرم بالعلم بأنه" قد تم عرض البحث على لجنة اخلاقيات البحث العلمي وقد قررت اللجنه الموافقه على اجراء البحث المشار اليه اعلاه .

للاطلاع واجراءاتكم لطفا .

واقبلوا الاحترام

مدير مستشفى البشير

الدكتور عصام الشريده

ص ب/ر س

٢٨٧١

المملكة الأردنية الهاشمية
www.moh.gov.jo

(6) ƨơǐdž

ƗƛơǴǐ!ƒ Ɨdžnjdž ýǒnjƮķ! Ǒdžǒǐƶķ!ƒ ƗdžƮƅ ƖƧǒdžǓƒ ǏƼƬķƮdž ƧǒƥdžǏ!ƒ ǁĂdžƧǒ!ƒ ƗƶdžǴƞ Ǉdž ǊƞĂdž ƔǴķǂ

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التاريخ : .... هـ
٢٠١٣/٣/٢٨
الموافق : .... م

حضرة الدكتور مدير مستشفى الاميره بسمه المحترم

تحية طيبة وبعد،،،،

يرجى العلم بان الطالبة مجد تيسير حسين سلامة تقوم بإجراء دراسة كمتطلب للحصول على درجة الماجستير تخصص إدارة عامة في جامعة اليرموك بعنوان :

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واقبلوا فائق الاحترام والتقدير،،،

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(7)ȿơǰdž

ƚƛơǴƿ!ƒ ƚdžnjdž ýǒnjʅk! ƚƶǒƥƿ Ǐ5Tkʅdž ƧǒƥdžǏ!ƒ ǁǍdžƧǒ!ƒ ƚƶdžǴɳ LJdž NJɳǍdž ɣǴkǂ

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حضرة الدكتور مدير مستشفى بديعة المحترم

تحية طيبة وبعد،،،،

يرجى العلم بان الطالبة مجد تيسير حسين سلامة تقوم بإجراء دراسة كمتطلب للحصول على درجة الماجستير تخصص إدارة عامة في جامعة اليرموك بعنوان :

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(8)ﻖﺤﻠﻤﻟﺍ

ŁƋƠǴŀƒ ŁƌǌƌƋ ŷǒǌȚƙ! ŁƋƠƧ ƖƧǒƋǕƒ Ǐ ƾTƙȚƋ ƧǒƥƋ Ǐ!ƒ ǁǍƋƧǒ!ƒ ŁƶƋǴƞ ǇƋ ǋƞǍƋ ƔǴƙǂ


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التاريخ : هـ
الموافق : ٢٠١٣/٣/٢٨ م

حضرة الدكتور مدير مستشفى رحمة المحترم

تحية طيبة وبعد،،،،

يرجى العلم بان الطالبة مجد تيسير حسين سلامة تقوم بإجراء دراسة كمتطلب للحصول على درجة الماجستير تخصص إدارة عامة في جامعة اليرموك بعنوان :

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ABSTRACT

Salamah, Majd Tayseer Husain. (2013). Empowerment and its Impact on Employees' Performance Development at Jordanian Public Hospitals in Northern Region from Employees' perspective, Master Thesis. Yarmouk University.

(Supervisor: Professor Naim Oglah Nusair)

This study aimed at identifying the empowerment level in public Jordanian hospitals in northern region, and its Impact on Employees' Performance Development, and to determine whether there were significant statistical differences at the level ($\alpha \leq 0.05$) in the trends of the respondents towards the empowerment level of employees in public jordanian hospitals, and towards the employee's performance development level in public jordanian hospitals, due to the personal and occupational variables, and to identify the empowerment level impact on employee's performance development in public jordanian hospitals in northern region .

To achieve the purpose of the study, (562) questionnairs were distributed among the employees in (11) hospitals in northern region (doctors, nurses, administrators, and technicians). The returned (528) questionnairs were subjected to statistical analysis, which were processed by appropriate statistical methods to test the hypotheses of the study in the light of using an analytical survey methodology. The study concluded with the following results:

1- There is a medium level of empowering employees in Public Jordanian Hospitals in Northern Region.

2- There is a low level of employee's performance development in Public Jordanian hospitals in northern region.

3- There aren't a statistical significant differences at the level of ($\alpha \leq 0.05$) in the trends of the respondents towards the level of empowering employees in public Jordanian hospitals in morthern region due to the personal and occupational variables (Gender, Eductional Qualifiction, job title), and there are significant differences at the level of ($\alpha \leq 0.05$) due to (age).

4 -There aren't a statistical significant differences at the level of ($\alpha \leq 0.05$) in the trends of the respondents towards the impact of the employee's performance development at public Jordanian due to the personal and occupational

variables (Gender, Eductional Qualifiction), and there are significant differences at the level of ($\alpha \leq 0.05$) in the trends of the respondents towards the impact of the employee's performance development due to (age, length of period, job title).
5 -There are statistical significant impact at the level of ($\alpha \leq 0.05$) of the level of empowering employees on the level of employee's performance development at public Jordanian hospitals in northern region.

The study ended with the following recommendations: Supporting Creative behavior for workers through granting incentives for creative employees, training and encouraging employees to propose new ideas, and granting them the necessary power to develop their performance. Increasing the confidence in distinguished employees by recognizing them, encouraging participation of workers in decision-making, and getting the employees informed of the results of their performance evaluation.

Keywords: Empowerment, Employees' Performance Development, Jordanian Hospitals.